

Please return this information to the person who requested it. THANKS.

Access DB# 119138

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: MOLLY CEPERLEY Examiner #: 59757 Date: 02/24/04  
Art Unit: 1641 Phone Number 301-272-0513 Serial Number: 10/046,730 (P2/US02/01404)  
Mail Box and Bldg/Room Location: Rm 3A51 Results Format Preferred (circle) PAPER DISK E-MAIL  
*Rem 3C70*

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

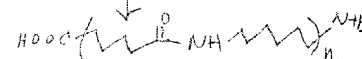
Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 01/17/02

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for the quaternary onium polymer of claim 2 in combination with each of the terms: chemiluminescence?, dioxetane, hydrogel, copolymer of dimethylacrylamide and vinylazlactone crosslinked with ethylenediamine, solid support, polyamide.



Quaternary onium compounds of claim 2 described in U.S. Pat. Nos. 2,780,604; 3,178,396; 3,770,439; 4,308,335; 4,340,522; 4,424,326.

See claims attached.

L23  
L26  
L28  
L32  
L35  
L41  
L45

\*\*\*\*\*  
**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#) _____	STN <u>556.54</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>4</u>	Questel/Orbit _____
Date Searcher Picked Up: <u>3/2</u>	Bibliographic _____	Dr. Link _____
Date Completed: <u>3/6</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>30</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>33</u>	Other _____	Other (specify) _____

FILE 'HCAPLUS' ENTERED AT 15:11:57 ON 02 MAR 2004  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

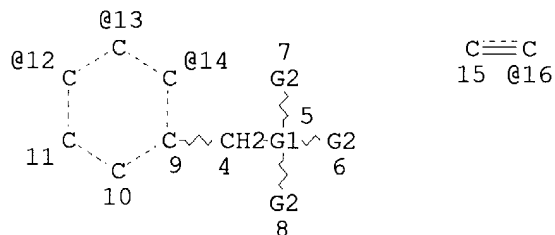
Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 2 Mar 2004 VOL 140 ISS 10  
 FILE LAST UPDATED: 1 Mar 2004 (20040301/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que 123

L7 SCR 2040  
 L17 STR



VAR G1=N/P  
 VAR G2=AK/CB  
 VPA 16-12/13/14 U  
 NODE ATTRIBUTES:  
 CONNECT IS E1 RC AT 15  
 CONNECT IS E2 RC AT 16  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

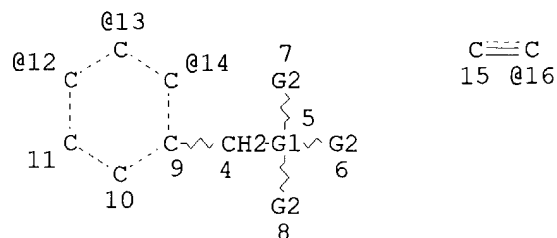
L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
**L23** 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND CHEMILUM?

=> d que 126

L7 SCR 2040

L17

STR



VAR G1=N/P

VAR G2=AK/CB

VPA 16-12/13/14 U

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 15

CONNECT IS E2 RC AT 16

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17

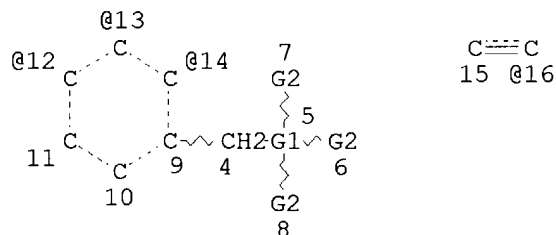
L24 1 SEA FILE=REGISTRY ABB=ON PLU=ON DIOXETANE/CN

L26 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L24 OR ?DIOXETAN?)

=&gt; d que 128

L7 SCR 2040

L17 STR



VAR G1=N/P

VAR G2=AK/CB

VPA 16-12/13/14 U

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 15

CONNECT IS E2 RC AT 16

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

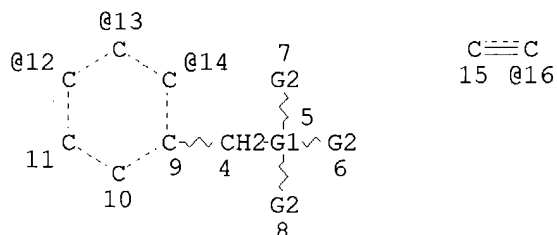
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
 L27 5404 SEA FILE=HCAPLUS ABB=ON PLU=ON HYDROGELS+OLD/CT  
**L28** 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L27 OR **HYDROGEL?**)

=> d que 132

L7 SCR 2040  
 L17 STR



VAR G1=N/P  
 VAR G2=AK/CB  
 VPA 16-12/13/14 U  
 NODE ATTRIBUTES:  
 CONNECT IS E1 RC AT 15  
 CONNECT IS E2 RC AT 16  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

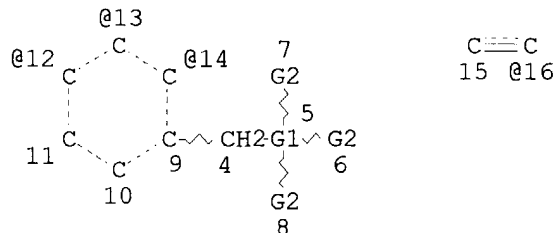
GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
 L29 1 SEA FILE=REGISTRY ABB=ON PLU=ON "DIMETHYLACRYLAMIDE" HOMOPOLYM  
 ER"/CN  
 L30 3194 SEA FILE=REGISTRY ABB=ON PLU=ON 2680-03-7/CRN  
 L31 1 SEA FILE=REGISTRY ABB=ON PLU=ON 2680-03-7  
**L32** 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L29 OR L30 OR L31)

=> d que 135

L7 SCR 2040  
 L17 STR



VAR G1=N/P  
 VAR G2=AK/CB  
 VPA 16-12/13/14 U  
 NODE ATTRIBUTES:

CONNECT IS E1 RC AT 15  
 CONNECT IS E2 RC AT 16  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

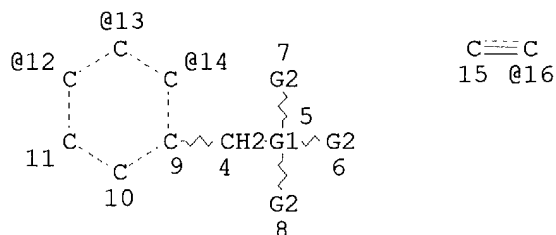
GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
 L33 1 SEA FILE=REGISTRY ABB=ON PLU=ON **ETHYLENEDIAMINE**/CN  
 L34 6515 SEA FILE=REGISTRY ABB=ON PLU=ON 107-15-3/CRN  
**L35** 5, SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND (L33 OR L34)

=> d que 141

L7 SCR 2040  
 L17 STR



VAR G1=N/P  
 VAR G2=AK/CB  
 VPA 16-12/13/14 U  
 NODE ATTRIBUTES:  
 CONNECT IS E1 RC AT 15  
 CONNECT IS E2 RC AT 16  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

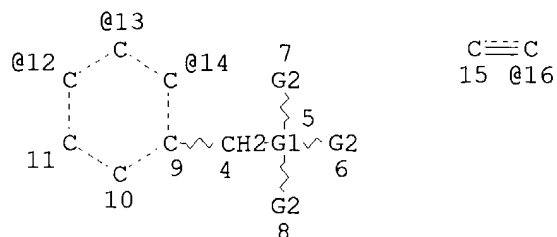
GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
**L41** 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND **SOLID AND SUPPORT**

=> d que 145

L7 SCR 2040  
 L17 STR



VAR G1=N/P  
 VAR G2=AK/CB  
 VPA 16-12/13/14 U  
 NODE ATTRIBUTES:  
 CONNECT IS E1 RC AT 15  
 CONNECT IS E2 RC AT 16  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE  
 L18 893 SEA FILE=REGISTRY SSS FUL L7 AND L17  
 L44 92421 SEA FILE=HCAPLUS ABB=ON PLU=ON **POLYAMIDES**+OLD/CT  
 L45 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L44

=> s 123 or 126 or 128 or 132  
 L46 36 L23 OR L26 OR L28 OR L32

=> s 123 or 126 or 128 or 132 or 135 or 141 or 145  
 L47 54 L23 OR L26 OR L28 OR L32 OR L35 OR L41 OR L45

=> d 147 ibib ab hitind hitstr 1-54

L47 ANSWER 1 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:633087 HCAPLUS  
 DOCUMENT NUMBER: 139:181832  
 TITLE: Paperboard for coated food containers having improved tactile and bulk insulation properties  
 INVENTOR(S): Swoboda, Dean P.; Swiontek, Anthony J.; Hartjes, Timothy P.; Shanton, Kenneth J.; Sandstrom, Erland R.  
 PATENT ASSIGNEE(S): Fort James Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 108 pp., Cont.-in-part of U.S. Ser. No. 18,563.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003152724	A1	20030814	US 2002-236347	20020906
PRIORITY APPLN. INFO.:			US 1997-806947	B2 19970226

US 1998-18563 A2 19980204

AB Paperboard for coated food containers with the title properties contain bulk-enhancing additives such as (coated) microspheres and chem. or thermally treated cellulose fibers, and high-bulk additive fibers. An example of a bulk-enhanced paper was based on 75% hardwood kraft fibers and 25% softwood kraft fibers and contained Apollo 600 (cationic starch) 12, Neuphor 635 (rosin size) 6, Reten 203 (poly-DADMAC) retention agent 2, and Expancel 820 (microspheres) 80 lb/ton.

IC ICM B32B001-02

NCL 428034200; 428143000

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)  
Section cross-reference(s): 17

IT 107-06-2D, 1,2 Dichloroethane, reaction products with amines  
**107-15-3D**, Ethylenediamine, reaction products with bishalo, bisepoxides or chlorohydrin compds. 111-40-0D, Diethylenetriamine, reaction products with bishalo, bisepoxides or chlorohydrin compds. 112-24-3D, reaction products with bishalo, bisepoxides or chlorohydrin compds. 1888-89-7D, 1,2,5,6-Diepoxyhexane, reaction products with amines 4075-28-9D, 2-Chloromethyl-1,3-butadiene, reaction products with dialkyl sulfides 7446-70-0, Aluminum chloride, uses 9002-98-6, Polymine PR 971L 10043-01-3, Alum 25988-97-0, Dimethylamine-epichlorohydrin copolymer **26780-21-2**, Poly(4-ethenylbenzyltrimethylammonium chloride) 27026-90-0, Formaldehyde-guanidine copolymer 51838-31-4, Poly(2,3-epoxypropyltrimethylammonium chloride) 54076-97-0, Poly(acryloyloxyethyltrimethylammonium chloride) 578725-13-0 578725-14-1

RL: FFD (Food or feed use); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(retention agent/coagulation agent; paperboard contg. bulk-enhancing additives for coated food containers with improved tactile and bulk insulation properties)

IT **107-15-3D**, Ethylenediamine, reaction products with bishalo, bisepoxides or chlorohydrin compds. **26780-21-2**, Poly(4-ethenylbenzyltrimethylammonium chloride)  
RL: FFD (Food or feed use); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)  
(retention agent/coagulation agent; paperboard contg. bulk-enhancing additives for coated food containers with improved tactile and bulk insulation properties)

RN 107-15-3 HCAPLUS

CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$$\text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}_2$$

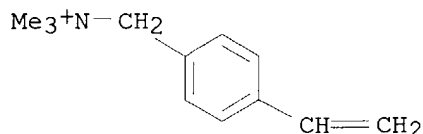
RN 26780-21-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 2 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:467351 HCAPLUS  
 DOCUMENT NUMBER: 139:44223  
 TITLE: Light-sensitive composition suitable as photoresist composition for fabricating lithographic printing plate, printed circuit, and color filter  
 INVENTOR(S): Furukawa, Akira; Doi, Kunihiro  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
 SOURCE: Ger. Offen., 48 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10250626	A1	20030618	DE 2002-10250626	20021030
JP 2003215801	A2	20030730	JP 2002-295956	20021009
US 2003190548	A1	20031009	US 2002-283071	20021030

PRIORITY APPLN. INFO.: JP 2001-334340 A 20011031  
 JP 2002-295956 A 20021009

AB The title light-sensitive compn. comprises (A) at least one water-sol. polymer, selected from a cationic water-sol. polymer with a vinyl group-substituted Ph group in its side chain and a water-sol. polymer with a vinyl group-substituted Ph group and a sulfonate group in its side chain, and (B) at least one compd. selected from photopolymn. initiator and one photoacid generator. The photopolymn. initiator is a trihaloalkyl-substituted compd. and/or a org. borate.

IC ICM G03F007-004  
 ICS C08F226-00; C08F228-00; C08F212-08; C08F218-00; C08F220-00

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 38

IT 7538-39-8 **14350-43-7** 25213-24-5D, Vinyl acetate-vinyl alcohol copolymer, acetals 54675-97-7 70818-22-3D, acetals with vinyl alc. polymers 94228-86-1 128738-52-3 132790-22-8 232599-55-2  
**540742-46-9 540742-48-1** 540742-50-5 540742-51-6  
 540742-52-7 540742-53-8 **540742-54-9 540742-55-0**  
 540742-59-4 540742-63-0 540742-65-2D, acetals with vinyl alc. polymers  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in light-sensitive compn. suitable as photoresist compn. for fabricating lithog. printing plate, printed circuit, and color filter)

IT 25232-41-1DP, Poly(4-vinylpyridine), reaction products with 4-chloromethylstyrene 25232-41-1DP, Poly(4-vinylpyridine), reaction



products with 4-chloromethylstyrene, methylated **100243-82-1DP**,  
N,N-Dimethylacrylamide-4-vinylpyridine copolymer, reaction products with  
4-chloromethylstyrene

RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(light-sensitive compn. suitable as photoresist compn. for fabricating  
lithog. printing plate, printed circuit, and color filter)

IT **14350-43-7 540742-46-9 540742-48-1**

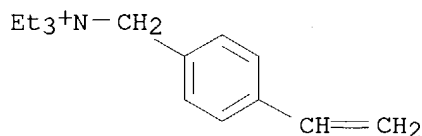
**540742-54-9 540742-55-0**

RL: TEM (Technical or engineered material use); USES (Uses)

(in light-sensitive compn. suitable as photoresist compn. for  
fabricating lithog. printing plate, printed circuit, and color filter)

RN 14350-43-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride (9CI) (CA INDEX  
NAME)



● Cl<sup>-</sup>

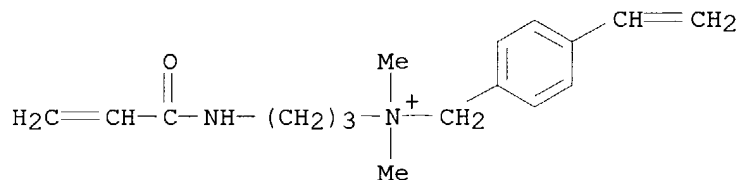
RN 540742-46-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-[3-[(1-oxo-2-  
propenyl)amino]propyl]-, chloride, polymer with N,N-dimethyl-2-propenamide  
and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 540742-45-8

CMF C17 H25 N2 O . Cl

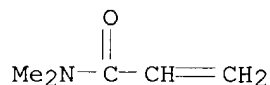


● Cl<sup>-</sup>

CM 2

CRN 2680-03-7

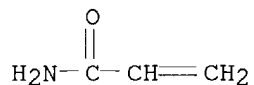
CMF C5 H9 N O



CM 3

CRN 79-06-1

CMF C3 H5 N O



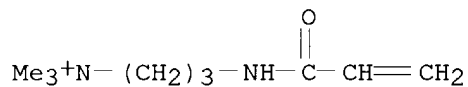
RN 540742-48-1 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N,N-dimethyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

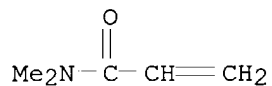
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2680-03-7

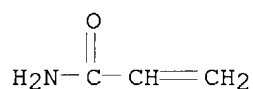
CMF C5 H9 N O



CM 3

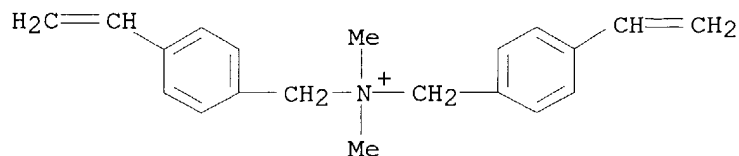
CRN 79-06-1

CMF C3 H5 N O



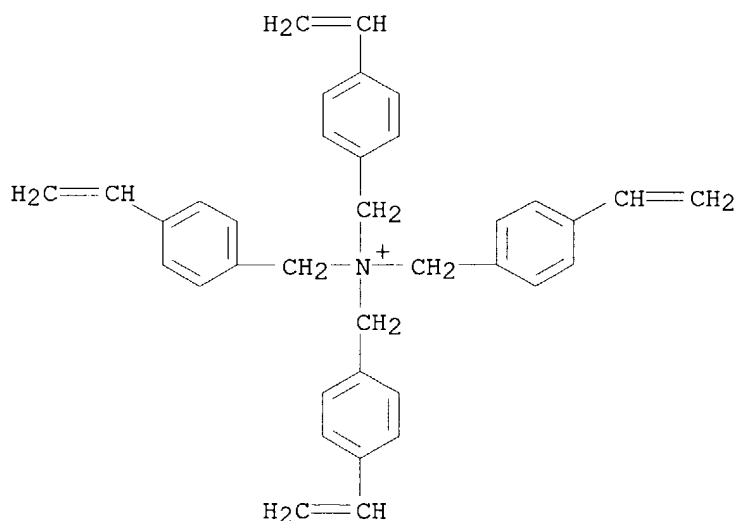
RN 540742-54-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N-[(4-ethenylphenyl)methyl]-N,N-dimethyl-,  
bromide (9CI) (CA INDEX NAME)



RN 540742-55-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-tris[(4-ethenylphenyl)methyl]-,  
bromide (9CI) (CA INDEX NAME)



PAGE 1-A



PAGE 2-A

IT 100243-82-1DP, N,N-Dimethylacrylamide-4-vinylpyridine copolymer,

reaction products with 4-chloromethylstyrene

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(light-sensitive compn. suitable as photoresist compn. for fabricating lithog. printing plate, printed circuit, and color filter)

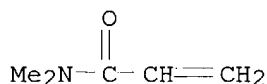
RN 100243-82-1 HCAPLUS

CN 2-Propenamide, N,N-dimethyl-, polymer with 4-ethenylpyridine (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

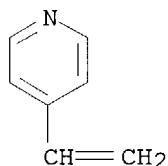
CMF C5 H9 N O



CM 2

CRN 100-43-6

CMF C7 H7 N



L47 ANSWER 3 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:174801 HCAPLUS

DOCUMENT NUMBER: 138:386073

TITLE: Swelling behavior of radiation-polymerized ampholytic two-component gels: Dynamic and equilibrium swelling kinetics

AUTHOR(S): Bhardwaj, Y. K.; Kumar, Virendra; Sabharwal, S.

CORPORATE SOURCE: Radiation Technology Development Section, Bhabha Atomic Research Centre, Mumbai, 400 085, India

SOURCE: Journal of Applied Polymer Science (2003), 88(3), 730-742

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly-ampholytic **hydrogels**, with varying degrees of crosslinking and ionic content, were prepd. by radiation polymn. of p-sodium styrene sulfonate (SSS) and vinyl benzyl trimethylammonium chloride (VBT). These gels were investigated for their dynamic and equil. swelling kinetics. Dynamic swelling of these gels established that the gels contg. equal amts. of SSS and VBT strictly follow Fickian diffusion. The

**hydrogels** contg. excess of SSS followed the case II type of diffusion, whereas those contg. excess of VBT followed anomalous diffusion. Equil. swelling kinetics of these gels in aq. system, ethanol-water mixt., at different pH, and in the presence of solns. of biol. interest was studied. It was seen that gels contg. equal amts. of SSS and VBT show the lowest equil. swelling. Swelling of the ampholytic gel decreased with an increase in the radiation dose imparted and the amt. of crosslinking agent incorporated in the gel. The gels having an excess of VBT showed higher equil. swelling in comparison to those having an excess of SSS. The org. solvents like ethanol cause abrupt collapse of the polyampholyte gels contg. excess of SSS and those contg. equal amts. of both the monomers at some crit. ratio of water and ethanol in swelling medium. However, the de-swelling in the water-ethanol mixt. was gradual for gels contg. an excess of VBT and the extent of de-swelling was also low for these gels in comparison to other gels. The swelled gels of all compns. de-swelled when they were transferred to solns. at pH in the range 2-12. Biol. important solutes like urea, glucose, and surfactants like Triton-X tend to further swell the polymer matrixes, whereas NaCl causes their de-swelling. The additive effect is more prominent for polyampholyte gels contg. excess of either of the monomers.

CC 36-7 (Physical Properties of Synthetic High Polymers)

Section cross-reference(s): 9

ST swelling kinetics diffusion **hydrogel** radiation crosslinking simulation

IT Diffusion

#### **Hydrogels**

Simulation and Modeling, physicochemical

(swelling of radiation-polymd. ampholytic two component gels)

IT **213338-48-8 237769-99-2**, Sodium p-styrenesulfonate-4-vinylbenzyl trimethylammonium chloride copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(swelling of radiation-polymd. ampholytic two component gels)

IT **213338-48-8 237769-99-2**, Sodium p-styrenesulfonate-4-vinylbenzyl trimethylammonium chloride copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(swelling of radiation-polymd. ampholytic two component gels)

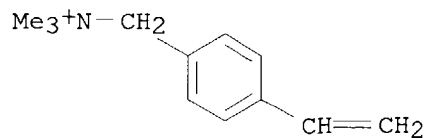
RN 213338-48-8 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

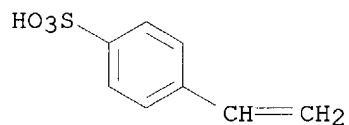
CMF C12 H18 N . Cl



CM 2

CRN 2695-37-6

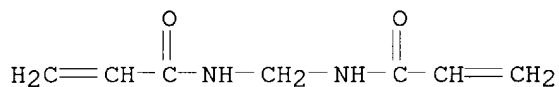
CMF C8 H8 O3 S . Na



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



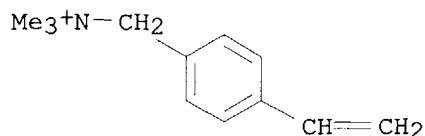
RN 237769-99-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

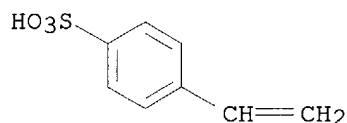


● Cl<sup>-</sup>

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 4 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:146468 HCAPLUS

DOCUMENT NUMBER: 138:182488

TITLE: Quaternary ammonium group-containing antimicrobial polymers and gels from the polymers

INVENTOR(S): Masui, Nobuaki; Deguchi, Shigeru; Tsujii, Kaoru; Horikoshi, Hirotake

PATENT ASSIGNEE(S): Japan Marine Science and Technology Center (Jamstec), Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003055108	A2	20030226	JP 2001-247124	20010816
PRIORITY APPLN. INFO.:			JP 2001-247124	20010816
OTHER SOURCE(S): MARPAT 138:182488				

AB The antimicrobial polymers are manufd. by copolyimg. CH<sub>2</sub>:CHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>N+Me<sub>2</sub>R<sub>1</sub>X<sup>-</sup> (R<sub>1</sub> = C<sub>1</sub>-18 linear or branched alkyl; X<sup>-</sup> = counter ion) with copolymerizable monomers. The gels are manufd. by gelling the above polymers with H<sub>2</sub>O. Vinylbenzyltrimethylhexadecylammonium chloride (prepn).

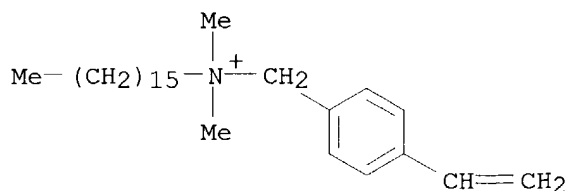
given) was polymd. with acrylamide and N,N'-methylenebisacrylamide to give copolymer. **Hydrogel** of the copolymer showed good antimicrobial effect against Escherichia coli, Pseudomonas aeruginosa, Saccharomyces cerevisiae, etc.

- IC ICM A01N033-12  
ICS A01N025-04; A01N025-10; A01N037-18; A01N037-26; A61L015-00; A61P029-00; C08F212-14; C08F220-56; A61F013-15; A61F013-472
- CC 5-2 (Agrochemical Bioregulators)  
Section cross-reference(s): 10, 38
- IT Antibacterial agents  
Fungicides  
**Hydrogels**  
(prepn. of quaternary ammonium group-contg. antimicrobial polymers and gels from the polymers)
- IT **499136-69-5P 499136-70-8P 499136-72-0P 499136-73-1P 499136-74-2P**  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of quaternary ammonium group-contg. antimicrobial polymers and gels from the polymers)
- IT **87810-16-0P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of quaternary ammonium group-contg. antimicrobial polymers and gels from the polymers)
- IT **499136-69-5P 499136-70-8P 499136-72-0P 499136-73-1P 499136-74-2P**  
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of quaternary ammonium group-contg. antimicrobial polymers and gels from the polymers)
- RN 499136-69-5 HCAPLUS
- CN Benzenemethanaminium, 4-ethenyl-N-hexadecyl-N,N-dimethyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 87810-16-0

CMF C27 H48 N . Cl



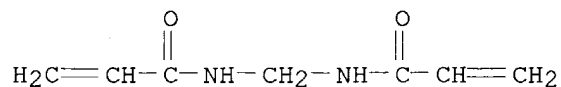
● Cl<sup>-</sup>



CM 2

CRN 110-26-9

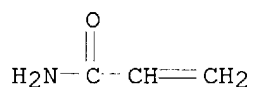
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



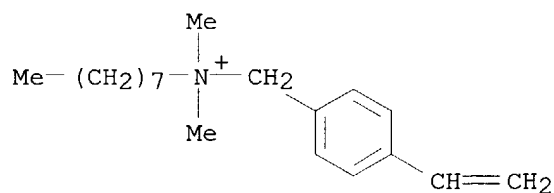
RN 499136-70-8 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-octyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 98473-87-1

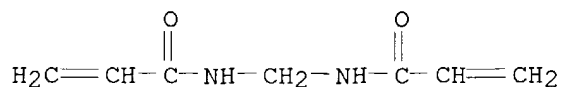
CMF C19 H32 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 110-26-9

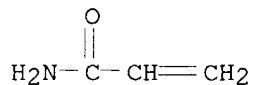
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



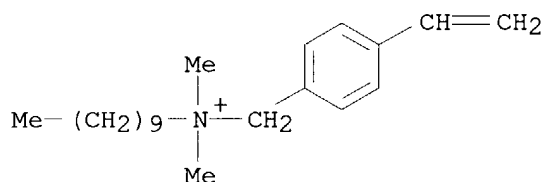
RN 499136-72-0 HCAPLUS

CN Benzenemethanaminium, N-decyl-4-ethenyl-N,N-dimethyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 499136-71-9

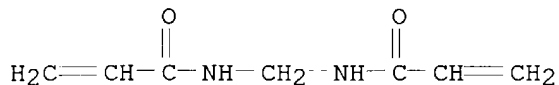
CMF C21 H36 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 110-26-9

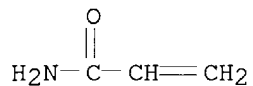
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O

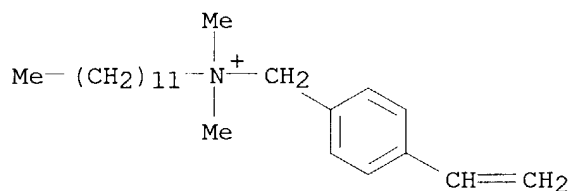


RN 499136-73-1 HCAPLUS  
 CN Benzenemethanaminium, N-dodecyl-4-ethenyl-N,N-dimethyl-, chloride, polymer  
 with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX  
 NAME)

CM 1

CRN 56307-84-7

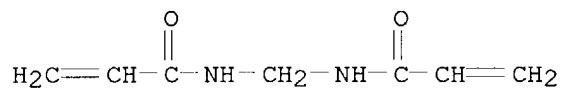
CMF C23 H40 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 110-26-9

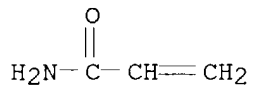
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



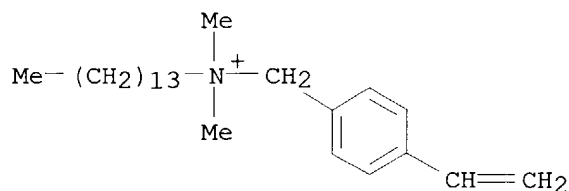
RN 499136-74-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-tetradecyl-, chloride,  
polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA  
INDEX NAME)

CM 1

CRN 48214-34-2

CMF C25 H44 N . Cl

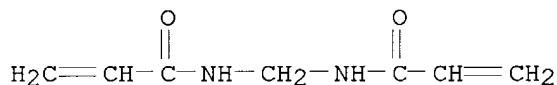


● Cl<sup>-</sup>

CM 2

CRN 110-26-9

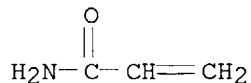
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



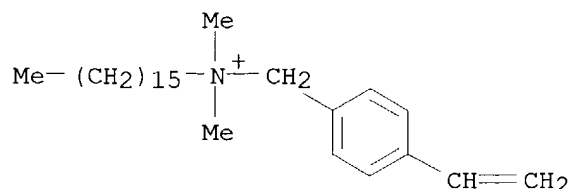
IT **87810-16-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. of quaternary ammonium group-contg. antimicrobial polymers and  
gels from the polymers)

RN 87810-16-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N-hexadecyl-N,N-dimethyl-, chloride (9CI)  
(CA INDEX NAME)



L47 ANSWER 5 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:833427 HCAPLUS

DOCUMENT NUMBER: 137:354035

TITLE: Method of transferring molecules to a coated film laminate having an ionic surface

INVENTOR(S): Coleman, Patrick L.; Halverson, Kurt J.; Hembre, James I.; Patil, Sanjay L.; Prabhu, Anila; Rajagopal, Raj; Rasmussen, Jerald K.; Swenson, Barbara C.; Quint, Patrick S.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002160530	A1	20021031	US 2001-845880	20010430
WO 2002088839	A2	20021107	WO 2002-US5505	20020214
WO 2002088839	A3	20030403		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-845880 A 20010430

AB The invention concerns methods of transferring mols. from a matrix to a coated laminate having an ionic surface are disclosed. The laminate includes a shrinkable substrate such as a polyethylene shrink film. The laminate also includes an ionic coating layer. The coating layer may include, for example, one or more ionic polymers, a **hydrogel** including hydrolyzed azlactone moieties, bifunctional mols. affixed to a **hydrogel**, or a **hydrogel** with an overcoating of one or more ionic polymers. The laminate also may include one or more mask layers affixed, directly or indirectly, to the substrate. Sample mols. may be transferred from the matrix to the laminate by an

energy-independent process or by a process that is energy-dependent, such as electroblotting. Because the laminate is shrinkable, sample mols. that have been transferred to the laminate may be concd. for use in a miniaturized assay.

IC ICM G01N033-543

NCL 436518000

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 9

IT Coating materials

Coupling agents

Electrophoresis

Films

Heat-shrinkable films

### Hydrogels

Laminated materials

(method of transferring mols. to a coated film laminate having an ionic surface)

IT Amino acids, uses

Azlactones

### Polyamides, uses

Polyamines

RL: DEV (Device component use); USES (Uses)

(method of transferring mols. to a coated film laminate having an ionic surface)

IT 56-87-1, Lysine, uses 100-43-6, 4-Vinylpyridine 100-69-6, 2-Vinylpyridine 105-16-8, 2-Diethylaminoethyl methacrylate 107-11-9, Allylamine 151-56-4, Ethylene imine, uses 593-67-9, Vinylamine 1121-55-7, 3-Vinylpyridine 1746-03-8, Vinylphosphonic acid 2426-54-2, 2-Diethylaminoethyl acrylate 2439-35-2, Dimethylaminoethyl acrylate 2817-45-0, Aminophosphonic acid 2867-47-2, Dimethylaminoethyl methacrylate 3402-98-0, Iduronic acid 3845-76-9 5039-78-1 5329-14-6, Aminosulfonic acid 7398-69-8, Diallyldimethylammonium chloride **7538-38-7**, 4-Vinylbenzyltrimethylammonium chloride 7582-21-0 7659-36-1, 2-Aminoethyl methacrylate 9002-86-2, Polyvinyl chloride 9004-32-4, Carboxymethylcellulose 9005-32-7, Alginic acid 9005-49-6, Heparin, uses 9012-36-6, Agarose 9012-76-4, Chitosan 9042-14-2, Dextran sulfate 10595-80-9, Sulfoethyl methacrylate 13052-11-4, 3-Methacryloxy-2-hydroxypropyltrimethylammonium chloride 13081-44-2 15214-89-8, 2-Acrylamido-2-methyl-1-propanesulfonic acid 18526-07-3, 3-Dimethylaminopropyl acrylate 20602-77-1, 3-Dimethylaminopropyl methacrylate 24615-84-7, 2-Carboxyethyl acrylate 24967-94-0, Dermatan sulfate 26913-06-4, Poly[imino(1,2-ethanediyl)] 26914-43-2, Styrenesulfonic acid 32120-16-4, Monoacryloxyethyl phosphate 36885-49-1 44992-01-0 45021-77-0, (3-Acrylamidopropyl)trimethylammonium chloride 45708-76-7 86742-39-4 154086-50-7

RL: DEV (Device component use); USES (Uses)

(method of transferring mols. to a coated film laminate having an ionic surface)

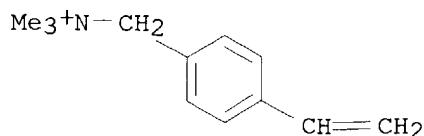
IT **7538-38-7**, 4-Vinylbenzyltrimethylammonium chloride

RL: DEV (Device component use); USES (Uses)

(method of transferring mols. to a coated film laminate having an ionic surface)

RN 7538-38-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



L47 ANSWER 6 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:684363 HCAPLUS

DOCUMENT NUMBER: 137:385158

TITLE: Humidity response of gel polyelectrolyte based on crosslinked copolymers containing both ammonium salt and amine function

AUTHOR(S): Gong, Myoung-Seon; Lee, Chil-Won

CORPORATE SOURCE: Department of Chemistry, Dankook University, Chungnam, 330-714, S. Korea

SOURCE: Materials Chemistry and Physics (2003), 77(3), 719-725  
CODEN: MCHPDR; ISSN: 0254-0584

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 4-Vinylbenzyl-di-Me-2-(dimethylamino)ethylammonium chloride monomer was prep'd. and copoly'd. with Bu acrylate and the copolymer was treated with 1,5-dibromopentane to obtain polyelectrolyte derivs. with two ammonium groups, one of them bridging (crosslinking) two chains. The isothermal absorption of moisture of the polyelectrolytes was measured. The crosslinked copolymer with 2:1 comonomer ratio has av. impedance of 715, 42.1, and 3.1 k.Ω. under 30, 60 and 90% RH, resp. The hysteresis, temp. dependence, frequency dependence, and response time of impedance were measured to establish the viability of the polyelectrolyte gels for use as humidity sensor.

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 36, 76

IT Electric impedance

#### Hydrogels

#### Polyelectrolytes

(prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)

IT **312539-11-0P**, 4-Vinylbenzyl dimethyl 2-(dimethylamino)ethylammonium chloride

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

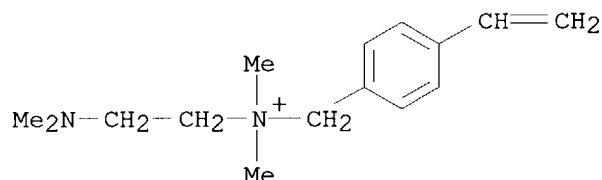
(monomer; prep'n. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)

IT **475672-31-2P**, Butyl acrylate-4-vinylbenzyl-dimethyl-2-(dimethylamino)ethylammonium chloride copolymer

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity

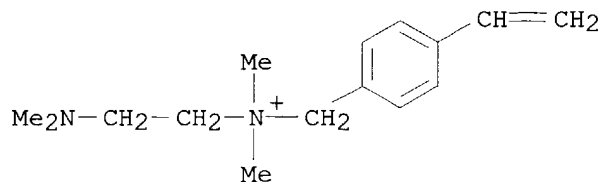
- toward use in sensors)
- IT **475672-33-4P**, Butyl acrylate-4-vinylbenzyl-dimethyl-2-(dimethylamino)ethylammonium chloride copolymer, compd. with 1,5-dibromopentane  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)
- IT **312539-11-0P**, 4-Vinylbenzyl dimethyl 2-(dimethylamino)ethylammonium chloride  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (monomer; prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)
- RN 312539-11-0 HCAPLUS
- CN Benzenemethanaminium, N-[2-(dimethylamino)ethyl]-4-ethenyl-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

- IT **475672-31-2P**, Butyl acrylate-4-vinylbenzyl-dimethyl-2-(dimethylamino)ethylammonium chloride copolymer  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)
- RN 475672-31-2 HCAPLUS
- CN Benzenemethanaminium, N-[2-(dimethylamino)ethyl]-4-ethenyl-N,N-dimethyl-, chloride, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)
- CM 1
- CRN 312539-11-0
- CMF C15 H25 N2 . Cl

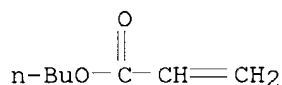




CM 2

CRN 141-32-2

CMF C7 H12 O2



IT **475672-33-4P**, Butyl acrylate-4-vinylbenzyl-dimethyl-2-(dimethylamino)ethylammonium chloride copolymer, compd. with 1,5-dibromopentane

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of gel acrylate polyelectrolytes contg. ammonium and reactive amine groups and elec. impedance as indicator of response to humidity toward use in sensors)

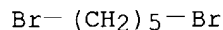
RN 475672-33-4 HCAPLUS

CN Benzenemethanaminium, N-[2-(dimethylamino)ethyl]-4-ethenyl-N,N-dimethyl-, chloride, polymer with butyl 2-propenoate, compd. with 1,5-dibromopentane (9CI) (CA INDEX NAME)

CM 1

CRN 111-24-0

CMF C5 H10 Br2



CM 2

CRN 475672-31-2

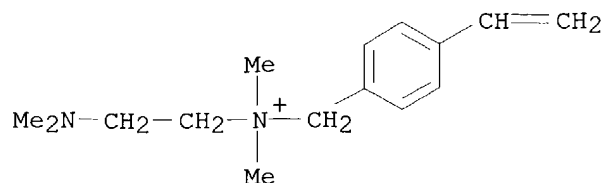
CMF (C15 H25 N2 . C7 H12 O2 . Cl)x

CCI PMS

CM 3

CRN 312539-11-0

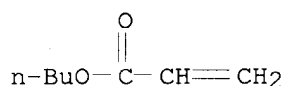
CMF C15 H25 N2 . Cl



● Cl<sup>-</sup>

CM 4

CRN 141-32-2  
CMF C7 H12 O2



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 7 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:862955 HCAPLUS

DOCUMENT NUMBER: 134:163400

TITLE: Preparation of thermosensitive and superabsorbent polymer **hydrogels** from trialkyl-4-vinylbenzyl phosphonium chloride-N-isopropylacrylamide-N,N'-methylenebisacrylamide copolymers and their properties

AUTHOR(S): Nonaka, Takamasa; Watanabe, Tsutomu; Kawabata, Tadashi; Kurihara, Seiji

CORPORATE SOURCE: Department of Applied Chemistry and Biochemistry, Faculty of Engineering, Kumamoto University, Kumamoto, 860-8555, Japan

SOURCE: Journal of Applied Polymer Science (2000), Volume Date 2001, 79(1), 115-124

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thermosensitive and superabsorbent polymer **hydrogels** were synthesized by copolymn. of three kinds of tri-n-alkyl vinylbenzyl phosphonium chlorides (TRVB) with different lengths of alkyl chains, N-isopropylacrylamide (NIPAAm), and N,N'-methylenebisacrylamide (MBAAm). The water-absorption ability and antibacterial activity of the **hydrogels** against Staphylococcus aureus (S. aureus) were investigated. The water content of TRVB-NIPAAm-MBAAm copolymers decreased with increasing temp. and increased with increasing phosphonium groups in

the copolymers, while it decreased with increasing chain length of the alkyl groups in the phosphonium groups as well as with an increasing degree of crosslinking in the copolymers. The TRVB-NIPAAm-MBAAm copolymers with a higher TRVB content in the copolymers exhibited higher antibacterial activity against *S. aureus*, but decreased with increasing chain length of alkyl groups in phosphonium groups. The TRVB-NIPAAm-MBAAm copolymers exhibited the highest antibacterial activity at 30.degree.C against *S. aureus* in deionized water.

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37, 38

ST trialkylvinylbenzylphosphonium chloride copolymer **hydrogel** prepn property; isopropylacrylamide copolymer **hydrogel** prepn property; methylenebisacrylamide copolymer **hydrogel** prepn property; heat sensitive phosphonium contg copolymer **hydrogel**; superabsorbent phosphonium contg copolymer **hydrogel**; antibacterial activity phosphonium contg copolymer **hydrogel**

IT Heat-sensitive materials

#### **Hydrogels**

Superabsorbents

(prepn. and properties of thermosensitive and superabsorbent **hydrogels** of trialkyl-vinylbenzyl phosphonium chloride-isopropylacrylamide-methylenebisacrylamide copolymer)

IT 7732-18-5, Water, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process) (absorption; prepn. and properties of thermosensitive and superabsorbent **hydrogels** of trialkyl-vinylbenzyl phosphonium chloride-isopropylacrylamide-methylenebisacrylamide copolymer)

IT **226710-72-1P**, N-Isopropylacrylamide-N,N'-methylenebisacrylamide-tributyl-4-vinylbenzyl phosphonium chloride copolymer **226710-74-3P**  
**226710-75-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and water absorption and antibacterial activity of thermosensitive and superabsorbent **hydrogels** of)

IT **226710-72-1P**, N-Isopropylacrylamide-N,N'-methylenebisacrylamide-tributyl-4-vinylbenzyl phosphonium chloride copolymer **226710-74-3P**  
**226710-75-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and water absorption and antibacterial activity of thermosensitive and superabsorbent **hydrogels** of)

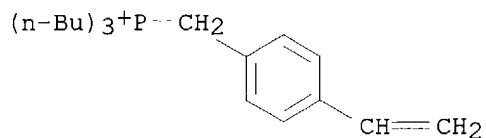
RN 226710-72-1 HCAPLUS

CN Phosphonium, tributyl[(4-ethenylphenyl)methyl]-, chloride, polymer with N,N'-methylenebis[2-propenamide] and N-(1-methylethyl)-2-propenamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 87864-42-4

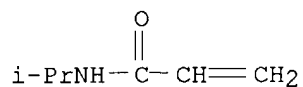
CMF C21 H36 P . Cl



CM 2

CRN 2210-25-5

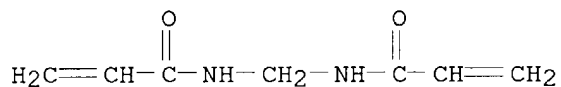
CMF C6 H11 N O



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



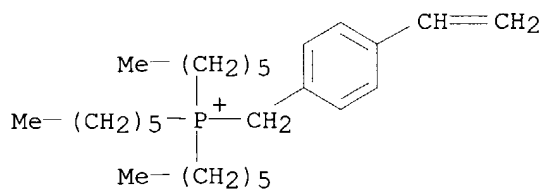
RN 226710-74-3 HCAPLUS

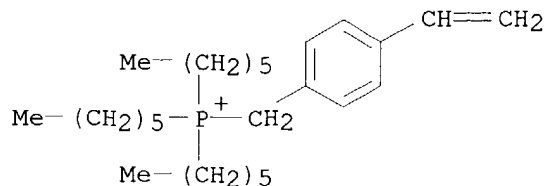
CN Phosphonium, [(4-ethenylphenyl)methyl]triethyl-, chloride, polymer with  
N,N'-methylenebis[2-propenamide] and N-(1-methylethyl)-2-propenamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 226710-73-2

CMF C27 H48 P . Cl

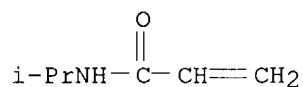




CM 2

CRN 2210-25-5

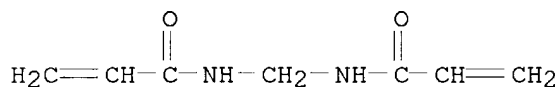
CMF C6 H11 N O



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



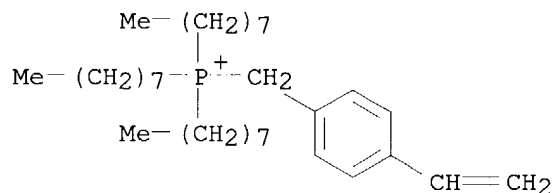
RN 226710-75-4 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and N-(1-methylethyl)-2-propenamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 74443-79-1

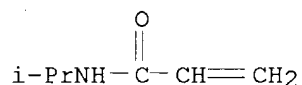
CMF C33 H60 P . Cl



● Cl<sup>-</sup>

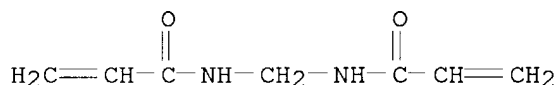
CM 2

CRN 2210-25-5  
CMF C6 H11 N O



CM 3

CRN 110-26-9  
CMF C7 H10 N2 O2



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 8 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:729417 HCAPLUS

DOCUMENT NUMBER: 134:5207

TITLE: Preparation of superabsorbent polymer **hydrogels** from trialkyl-4-vinylbenzyl phosphonium chloride-acrylamide-methylenebisacrylamide terpolymers and their properties

AUTHOR(S): Nonaka, Takamasa; Yamada, Kenji; Watanabe, Tsutomu; Kurihara, Seiji

CORPORATE SOURCE: Department of Applied Chemistry and Biochemistry, Faculty of Engineering, Kumamoto University, Kumamoto, 860-8555, Japan

SOURCE: Journal of Applied Polymer Science (2000), 78(10), 1833-1844

CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

- AB Super-absorbent polymer gels were synthesized by terpolymn. of three kinds of tri-n-alkyl-4-vinylbenzyl phosphonium chloride (TRVB) with alkyl chains of different lengths, with acrylamide (AAM), and with N,N'-methylenebisacrylamide (MBAAM). The water absorption ability and antibacterial activity of the gels against Staphylococcus aureus (S. aureus) and Escherichia coli (E. coli) were studied. The water content of TRVB-AAM-MBAAM terpolymers increased with increasing phosphonium groups in the terpolymer and decreased with increasing alkyl chain length in phosphonium groups and increasing degree of crosslinking in the terpolymers. The water content of the terpolymers was depressed by addn. of NaCl and this effect became higher as the alkyl chain length increased. The tri-n-octyl-4-vinylbenzyl phosphonium chloride (TOVB)-AAM-MBAAM terpolymers exhibited high antibacterial activity against S. aureus and E. coli in deionized water. The antibacterial activity decreased in 0.9% NaCl soln. The antibacterial activity of TOVB-AAM-MBAAM terpolymers with almost the same phosphonium content increased with increasing swelling ratio.
- CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 36, 38
- ST alkylvinylbenzylphosphonium chloride acrylamide methylenebisacrylamide copolymer prepn **hydrogel**; superabsorbent **hydrogel**  
acrylic alkylvinylbenzylphosphonium chloride antibacterial activity; swelling water uptake acrylic alkylvinylbenzylphosphonium chloride **hydrogel**
- IT Antibacterial agents  
Crosslinking  
Escherichia coli  
**Hydrogels**  
Staphylococcus aureus  
Superabsorbents  
Swelling, physical  
(prepn. and water absorption and antibacterial activity of superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium chloride - acrylamide - methylenebisacrylamide terpolymers)
- IT 7732-18-5, Water, processes  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(absorption; prepn. and water absorption and antibacterial activity of superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium chloride - acrylamide - methylenebisacrylamide terpolymers)
- IT 515-42-4, Sodium benzenesulfonate 25155-30-0, Sodium dodecylbenzenesulfonate  
RL: PEP (Physical, engineering or chemical process); PROC (Process)  
(prepn. and water absorption and antibacterial activity of superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium chloride - acrylamide - methylenebisacrylamide terpolymers)
- IT **308286-41-1P**, Acrylamide-N,N'-methylenebisacrylamide-tri-n-butyl-4-vinylbenzylphosphonium chloride copolymer **308286-42-2P**, Acrylamide-N,N'-methylenebisacrylamide-tri-n-hexyl-4-vinylbenzylphosphonium chloride copolymer **308286-43-3P**, Acrylamide-N,N'-methylenebisacrylamide-tri-n-octyl-4-vinylbenzylphosphonium chloride copolymer  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and water absorption and antibacterial activity of superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium chloride - acrylamide - methylenebisacrylamide terpolymers)
- IT 7647-14-5, Sodium chloride, uses

RL: NUU (Other use, unclassified); USES (Uses)  
 (soln. system; prepn. and water absorption and antibacterial activity  
 of superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium  
 chloride - acrylamide - methylenebisacrylamide terpolymers)

IT **308286-41-1P**, Acrylamide-N,N'-methylenebisacrylamide-tri-n-butyl-4-  
 vinylbenzylphosphonium chloride copolymer **308286-42-2P**,  
 Acrylamide-N,N'-methylenebisacrylamide-tri-n-hexyl-4-  
 vinylbenzylphosphonium chloride copolymer **308286-43-3P**,  
 Acrylamide-N,N'-methylenebisacrylamide-tri-n-octyl-4-  
 vinylbenzylphosphonium chloride copolymer

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and water absorption and antibacterial activity of  
 superabsorbent **hydrogels** of alkyl-vinylbenzylphosphonium  
 chloride - acrylamide - methylenebisacrylamide terpolymers)

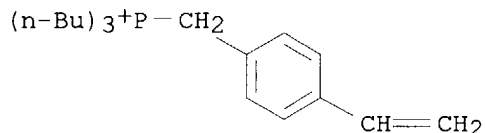
RN 308286-41-1 HCAPLUS

CN Phosphonium, tributyl[(4-ethenylphenyl)methyl]-, chloride, polymer with  
 N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 87864-42-4

CMF C21 H36 P . Cl

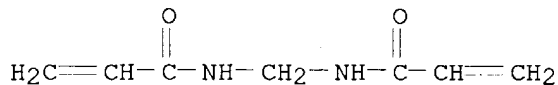


● Cl<sup>-</sup>

CM 2

CRN 110-26-9

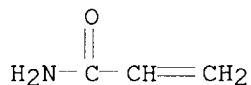
CMF C7 H10 N2 O2



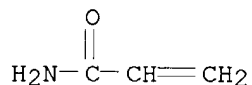
CM 3

CRN 79-06-1

CMF C3 H5 N O







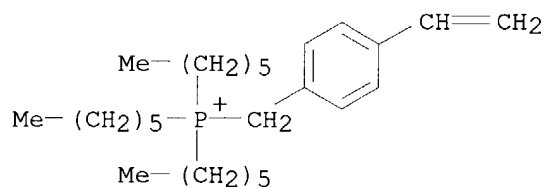
RN 308286-42-2 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]trihexyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 226710-73-2

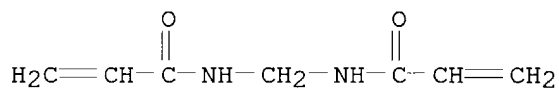
CMF C27 H48 P . Cl

● Cl<sup>-</sup>

CM 2

CRN 110-26-9

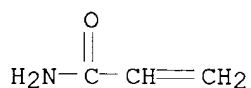
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O

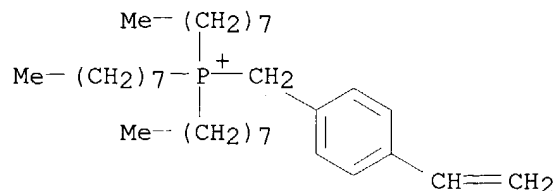


RN 308286-43-3 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride, polymer with N,N'-methylenebis[2-propenamide] and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

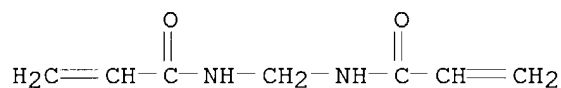
CRN 74443-79-1  
CMF C33 H60 P . Cl



● Cl<sup>-</sup>

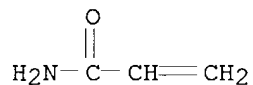
CM 2

CRN 110-26-9  
CMF C7 H10 N2 O2



CM 3

CRN 79-06-1  
CMF C3 H5 N O



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 9 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:451357 HCAPLUS

DOCUMENT NUMBER: 134:86748

TITLE: Molecular dynamics study of single/multichain coulomb polymers and the effects of salt ions

AUTHOR(S): Tanaka, Motohiko; Grosberg, A. Yu; Tanaka, Toyochi

CORPORATE SOURCE: National Institute for Fusion Science, Toki, 509-5292, Japan

SOURCE: Research Report - NIFS-PROC Series (1999),  
43(Structure Formation and Function of Gaseous,  
Biological and Strongly Coupled Plasmas), 9-19  
CODEN: RNPSE5; ISSN: 0915-6348

PUBLISHER: National Institute for Fusion Science  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

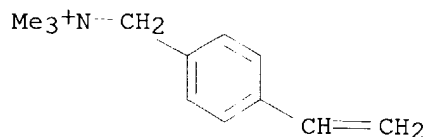
- AB The dynamic behaviors and equil. properties of charged polymers of random sequences (polyampholytes) are studied for both the single-chain and multichain cases with the use of mol. dynamics simulations. Single-chain polyampholyte has three temp. regimes under neutral condition, which are characterized by an elongated Gaussian coil and a very dense globule for high and low temps., resp., and by a transition between them at medium temp. The size of a single-chain polyampholyte shows hysteresis against slow cyclic temp. changes under the Coulomb force and short-range attraction force. The multichain polyampholyte takes a segregated globular phase at low temp., and the wall-bound one-phase state with sepd. chains at high temp. The polyampholyte chains overlap significantly below the crit. temp., at which glass transition takes place. Added salt ions screen the elec. field between the monomers and make the polyampholyte sol. when their d. is comparable to that of the polyampholyte.
- CC 36-7 (Physical Properties of Synthetic High Polymers)
- ST styrene sulfate vinyl benzene trimethylammonium **hydrogel** mol dynamic simulation; polyelectrolyte acrylamidomethylpropanesulfonic acid swelling salt effect elec field permittivity
- IT Glass transition  
**Hydrogels**  
 Polyelectrolytes  
 Radius of gyration  
 Swelling, physical  
 (mol. dynamics study of single/multichain coulomb polymers and the effects of salt ions)
- IT **28088-53-1** 154245-12-2  
 RL: PRP (Properties)  
 (mol. dynamics study of single/multichain coulomb polymers and the effects of salt ions)
- IT **28088-53-1**  
 RL: PRP (Properties)  
 (mol. dynamics study of single/multichain coulomb polymers and the effects of salt ions)
- RN 28088-53-1 HCAPLUS
- CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, homopolymer, salt with 4-ethenylbenzenesulfonic acid homopolymer (9CI) (CA INDEX NAME)

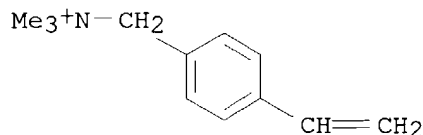
CM 1

CRN 49718-56-1  
 CMF (C12 H18 N)x  
 CCI PMS

CM 2

CRN 46231-82-7  
 CMF C12 H18 N



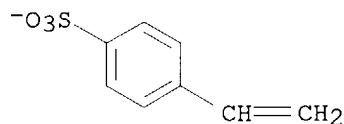


CM 3

CRN 49718-51-6  
 CMF (C8 H7 O3 S)x  
 CCI PMS

CM 4

CRN 46061-72-7  
 CMF C8 H7 O3 S



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 10 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:392898 HCAPLUS

DOCUMENT NUMBER: 133:18892

TITLE: Functional coat films with long service life, articles bearing the films and method for their manufacture

INVENTOR(S): Higuchi, Yoshiki; Harada, Eiji; Nojima, Takayuki; Omura, Hiroshi

PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000158594	A2	20000613	JP 1998-333822	19981125
PRIORITY APPLN. INFO.:			JP 1998-333822	19981125

AB The films are coated on a substrate as an under layer and a top layer which is chem. bonded to the under layer by 3,3',4,4'-tetra(tert-butylperoxycarbonyl)benzophenone (I) compd. where the under layer is derived from radical-polymerizable monomers and the top layer is derived from functional monomers. Thus, coating a mixt. of I 0.5, PPZ (phosphazene methacrylate deriv.) 1.5 and propylene glycol monomethyl ether 98% on the surface of an acrylic resin panel to dry thickness of 0.5 .mu.m, drying, irradiating with UV light, coating on top with a mixt. of

N,N-dimethylacrylamide 20 and water 80% and irradiating with UV light gave a coated panel with a transparent film having pencil hardness 2H and good adhesion and resistance to fogging.

IC ICM B32B027-00  
ICS C08J007-04

CC 42-10 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38

IT **272119-32-1P**, N,N-Dimethylacrylamide-hexakis(methacryloyloxyethoxy)cyclotriphosphazene copolymer 272119-33-2P, Sodium 2-acrylamido-2-methylpropanesulfonate-Hexakis(methacryloyloxyethoxy)cyclotriphosphazene copolymer 272119-34-3P, KBM 503-NK Ester A 600-hexakis(methacryloyloxyethoxy)cyclotriphosphazene-sodium methacrylate-trimethylolpropane triacrylate copolymer 272119-35-4P, Blemmer QA-trimethylolpropane triacrylate copolymer 272119-36-5P, KBM 503-2-(perfluorohexyl)ethyl acrylate-Hexakis(methacryloyloxyethoxy)cyclotriphosphazene copolymer 272119-37-6P, Hexakis(methacryloyloxyethoxy)cyclotriphosphazene-KBM 503-sodium 2-acrylamido-2-methylpropanesulfonate copolymer **272119-38-7P**, NK Ester A 600-N,N-dimethylacrylamide-hexakis(methacryloyloxyethoxy)cyclotriphosphazene-trimethylolpropane triacrylate copolymer **273221-38-8P**, Hexakis(methacryloyloxyethoxy)cyclotriphosphazene-trioctyl(4-vinylbenzyl)phosphonium chloride) copolymer  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(functional coat films with long service life, articles bearing films and method for manuf.)

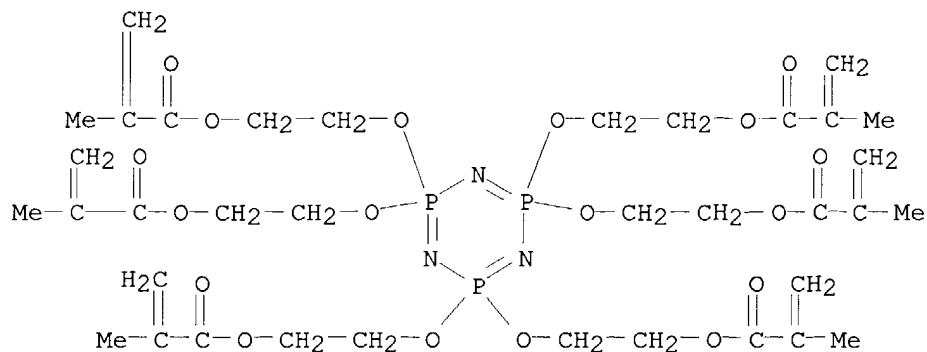
IT **272119-32-1P**, N,N-Dimethylacrylamide-hexakis(methacryloyloxyethoxy)cyclotriphosphazene copolymer **272119-38-7P**, NK Ester A 600-N,N-dimethylacrylamide-hexakis(methacryloyloxyethoxy)cyclotriphosphazene-trimethylolpropane triacrylate copolymer **273221-38-8P**, Hexakis(methacryloyloxyethoxy)cyclotriphosphazene-trioctyl(4-vinylbenzyl)phosphonium chloride) copolymer  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(functional coat films with long service life, articles bearing films and method for manuf.)

RN 272119-32-1 HCAPLUS

CN 2-Propenamide, N,N-dimethyl-, polymer with 2,2,4,4,6,6-hexahydro-2,2,4,4,6,6-hexakis[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-1,3,5,2,4,6-triazatriphosphorine (9CI) (CA INDEX NAME)

CM 1

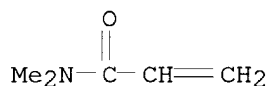
CRN 92832-53-6  
CMF C36 H54 N3 O18 P3



CM 2

CRN 2680-03-7

CMF C5 H9 N O



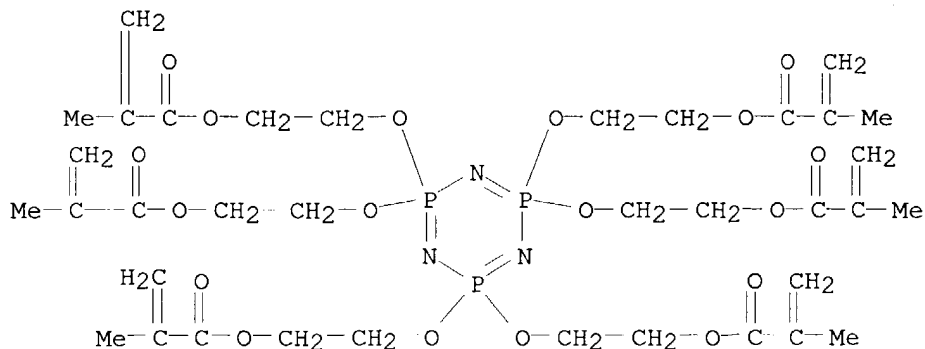
RN 272119-38-7 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with N,N-dimethyl-2-propenamide, 2,2,4,4,6,6-hexahydro-2,2,4,4,6,6-hexakis[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-1,3,5,2,4,6-triazatriphosphorine and .alpha.-(1-oxo-2-propenyl)-.omega.-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

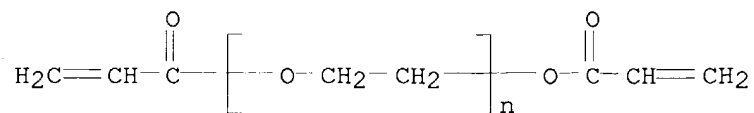
CRN 92832-53-6

CMF C36 H54 N3 O18 P3



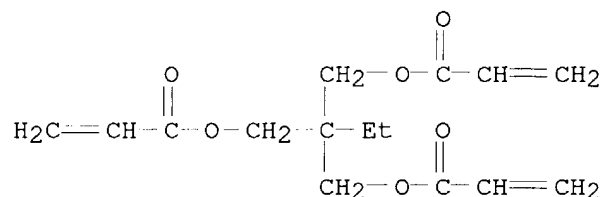
CM 2

CRN 26570-48-9  
CMF (C2 H4 O)n C6 H6 O3  
CCI PMS



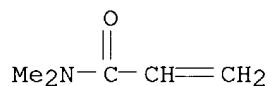
CM 3

CRN 15625-89-5  
CMF C15 H20 O6



CM 4

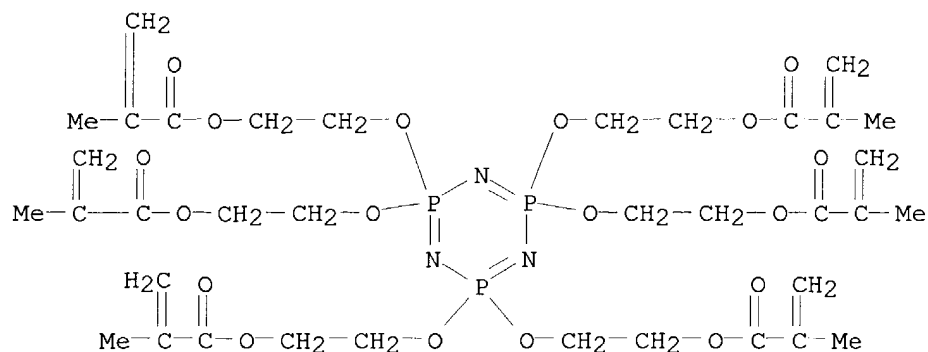
CRN 2680-03-7  
CMF C5 H9 N O



RN	273221-38-8	HCAPLUS
CN	Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride, polymer with 2,2,4,4,6,6-hexahydro-2,2,4,4,6,6-hexakis[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-1,3,5,2,4,6-triazatriphosphorine (9CI) (CA INDEX NAME)	

CM 1

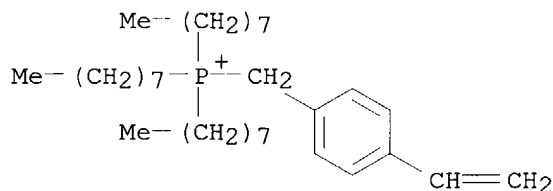
CRN 92832-53-6  
CMF C36 H54 N3 O18 P3



CM 2

CRN 74443-79-1

CMF C33 H60 P . Cl

● Cl<sup>-</sup>

L47 ANSWER 11 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:640624 HCAPLUS

DOCUMENT NUMBER: 131:262675

TITLE: Ocular lens material

INVENTOR(S): Kazuhiko, Nakada; Sadanori, Oono

PATENT ASSIGNEE(S): Menicon Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 947856	A2	19991006	EP 1999-106591	19990331
EP 947856	A3	20001018		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11286521	A2	19991019	JP 1998-91437	19980403
PRIORITY APPLN. INFO.:			JP 1998-91437	A 19980403
AB An ocular lens material comprising a polymer prepd. by polymg. a monomer				



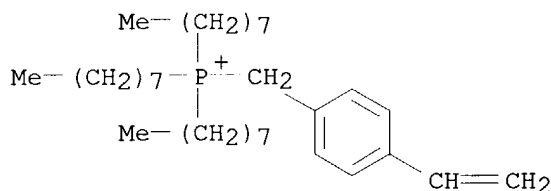
mixt. contg. at least one of (A-1)  $H_2C:CR_1CO_2R_2P+R_3$  X1-wherein R1 is H or Me, R2 is an alkylene group having 1 to 8 carbon atoms, R3 is an alkyl group having 1 to 18 carbon atoms and X1 is a halogen atom, and (A-2)  $CH_2:CR_4C_6H_4R_5P+R_6$  X2- wherein R4 is H or Me, R5 is an alkylene group having 1 to 8 carbon atoms, R6 is an alkyl group having 1 to 18 carbon atoms and X2 is a halogen atom. The ocular lens material shows excellent antibacterial property. A compn. comprised tri-n-butyl (2-methacryloyloxyethyl)phosphonium chloride, 2-hydroxyethyl methacrylate and ethylene dimethacrylate.

IC ICM G02B001-04  
ICS C08F230-02; C08F246-00  
CC 63-7 (Pharmaceuticals)  
IT 245117-41-3P **245117-43-5P 245117-44-6P**  
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(ocular lens material comprising phosphonium vinyl polymers)  
IT **245117-43-5P 245117-44-6P**  
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(ocular lens material comprising phosphonium vinyl polymers)  
RN 245117-43-5 HCAPLUS  
CN Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride, polymer with  
1-ethenyl-2-pyrrolidinone and methyl 2-methyl-2-propenoate (9CI) (CA  
INDEX NAME).

CM 1

CRN 74443-79-1

CMF C33 H60 P . Cl

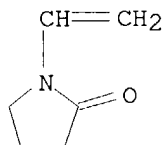


● Cl<sup>-</sup>

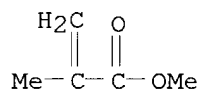
CM 2

CRN 88-12-0

CMF C6 H9 N O

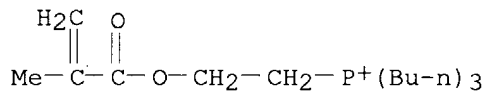


CM 3

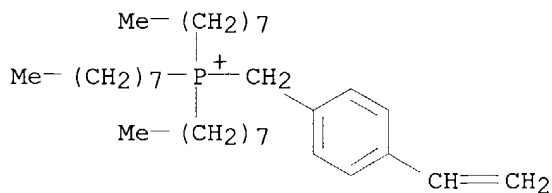
CRN 80-62-6  
CMF C5 H8 O2

RN 245117-44-6 HCAPLUS  
CN Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride, polymer with N,N-dimethyl-2-propenamide, methyl 2-methyl-2-propenoate and tributyl[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]phosphonium chloride (9CI) (CA INDEX NAME)

CM 1

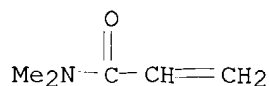
CRN 110769-39-6  
CMF C18 H36 O2 P . Cl● Cl<sup>-</sup>

CM 2

CRN 74443-79-1  
CMF C33 H60 P . Cl● Cl<sup>-</sup>

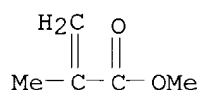
CM 3

CRN 2680-03-7  
CMF C5 H9 N O



CM 4

CRN 80-62-6  
CMF C5 H8 O2

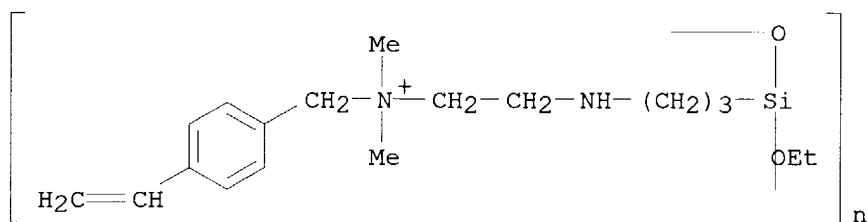


L47 ANSWER 12 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1999:271418 HCAPLUS  
DOCUMENT NUMBER: 130:325791  
TITLE: Reinforcing mineral fibers  
INVENTOR(S): Hennissen, Bernardus G. M.; Ghijzen, Cor J. M.  
PATENT ASSIGNEE(S): Rockwool International A/S, Den.  
SOURCE: PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9919396	A1	19990422	WO 1998-DK440	19981009
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9894340	A1	19990503	AU 1998-94340	19981009
EP 1023381	A1	20000802	EP 1998-947414	19981009
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
PRIORITY APPLN. INFO.:			EP 1997-610046	A 19971010
			WO 1998-DK440	W 19981009
OTHER SOURCE(S): MARPAT 130:325791				
AB The invention relates to mineral fibers treated with a coupling agent, e.g. a silane compd., to result in covalent bonding of the coupling agent to the fiber surface, as well as a free-flowing mineral fiber granulate suitable for the reinforcement of thermoplastic or thermosetting				

materials, in particular a free-flowing mineral fiber granulate contg. coupling agent-treated mineral fibers coated with or embedded in a compatibilizer (e.g., nonionic, cationic, or anionic surfactants) or wetting agent [e.g., polyethylene glycol (derivs.) or polypropylene glycol (derivs.)] that serves to enhance dispersibility of the mineral fibers in a thermoplastic or thermosetting material. The mineral fibers and mineral fiber granulates of the invention are easily dispersed in polymers such as polypropylene and result in fiber-reinforced shaped articles with improved strength properties due to the improved fiber dispersion and improved bonding between the fibers and the polymer.

- IC ICM C08K007-04  
ICS C08K009-04
- CC 37-6 (Plastics Manufacture and Processing)
- IT Acrylic polymers, uses  
**Polyamides, uses**  
 Polycarbonates, uses  
 Polyesters, uses  
 Polyimides, uses  
 Polyolefins  
 Polyurethanes, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (free-flowing reinforcing mineral fiber granulates treated by coupling agents and coated with compatibilizer/wetting agents)
- IT 223559-84-0 **223646-89-7** 223669-84-9, Dynasylan 1372  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (coupling agent; free-flowing reinforcing mineral fiber granulates treated by coupling agents and coated with compatibilizer/wetting agents)
- IT **223646-89-7**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (coupling agent; free-flowing reinforcing mineral fiber granulates treated by coupling agents and coated with compatibilizer/wetting agents)
- RN 223646-89-7 HCAPLUS
- CN Poly[oxy[[3-[[2-[[4-ethenylphenyl)methyl]dimethylammonio]ethyl]amino]propyl]ethoxysilylene]], chloride (9CI) (CA INDEX NAME)



● x Cl<sup>-</sup>

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 13 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:182450 HCAPLUS

DOCUMENT NUMBER: 130:244494  
 TITLE: Resin composition containing styrene-methacrylate copolymer and ink-jet printing medium therewith  
 INVENTOR(S): Nagata, Manabu; Takemori, Shinichi; Imai, Takahiro; Miyamoto, Hiroshi  
 PATENT ASSIGNEE(S): Sumitomo Seika K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11070730	A2	19990316	JP 1997-232877	19970828

PRIORITY APPLN. INFO.: JP 1997-232877 19970828

AB Claimed resin compn. comprises a crosslinked poly(alkylene oxide) 13-95, an ethylene-contg. copolymer or a polyamide 2-70, a cationic polymer 1-50, and a styrene-methacrylate copolymer 1-30%. The cationic polymer may be a maleimide-type copolymer. The medium shows excellent ink fixability and provides water- and heat-resistant images.

IC ICM B41M005-00  
 ICS B32B027-00; B41J002-01; B29L009-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 37

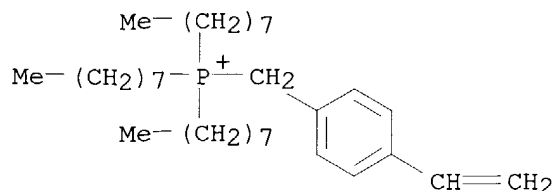
IT **Polyamides, uses**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-receiving resin compn. contg. styrene-methacrylate copolymer for waterproofed ink-jet printing medium)

IT 74-85-1D, Ethylene, polymer with acrylic acid ester an maleic acid  
 79-10-7D, Acrylic acid, ester, polymer with ethylene and maleic acid  
 110-16-7D, Maleic acid, polymer with acrylic acid ester and ethylene  
 9010-77-9, Acrylic acid-ethylene copolymer 9010-86-0, Ethyl  
 acrylate-ethylene copolymer 24937-16-4, Nylon 12 24937-78-8, Evatate D  
 3012 25035-02-3, Nylon 8 25035-04-5, Nylon 11 25038-54-4, Nylon 6,  
 uses 25038-74-8 25053-53-6, Ethylene-methacrylic acid copolymer  
 25067-34-9, Eval EP F 101 25101-13-7, Acryft WH 302 25190-92-5, Nylon  
 8 25191-04-2, 7125U 25587-80-8 25750-23-6, Grivory G 21  
 26222-39-9, Lunapale 912 26777-62-8, Adipic acid- .epsilon.-caprolactam-  
 dodecanolactam- hexamethylenediamine copolymer 32131-17-2, Nylon 66,  
 uses **74443-79-1**, Cydaps 8CMS 157970-53-1, Reolex AS 170  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-receiving resin compn. contg. styrene-methacrylate copolymer for waterproofed ink-jet printing medium)

IT **74443-79-1**, Cydaps 8CMS  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-receiving resin compn. contg. styrene-methacrylate copolymer for waterproofed ink-jet printing medium)

RN 74443-79-1 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]trioctyl-, chloride (9CI) (CA INDEX NAME)



L47 ANSWER 14 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:689183 HCAPLUS

DOCUMENT NUMBER: 129:302996

TITLE: Preparation of self-acid-doped sulfonic acid ring-substituted polyaniline in its aqueous form, and polymer blends made therefrom

INVENTOR(S): Chen, Show An; Hwang, Gue Wu

PATENT ASSIGNEE(S): National Science Council, Taiwan

SOURCE: U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 501,593.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5821344	A	19981013	US 1997-787131	19970122
PRIORITY APPLN. INFO.:			US 1995-501593	19950712

AB The present invention discloses a process for prepg. an aq. soln. of self-acid-doped o-sulfonic acid ring-substituted polyaniline, which can be cast into free-standing films. The process involves dissolving a solid o-sulfonic acid ring-substituted polyaniline in an alk. aq. soln. to form an aq. soln. of an undoped o-sulfonate ring-substituted polyaniline; purifying the aq. soln. of the undoped o-sulfonate ring-substituted polyaniline by subjecting it to a purifying treatment to remove excess alkali therefrom; and contacting the resulting purified aq. soln. with a H<sup>+</sup> -type ion-exchange resin to form an aq. soln. contg. a self-acid-doped o-sulfonic acid ring-substituted polyaniline. A suitable water sol. polymer or polymer emulsion can be easily mixed with the aq. soln. contg. the self-acid-doped o-sulfonic acid ring-substituted polyaniline to form a polymer blend.

IC C08G073-00

NCL 528422000

CC 35-5 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 37

IT 1343-98-2, Poly(silicic acid) 9002-89-5, Poly(vinyl alcohol) 9002-98-6  
9003-01-4, Poly(acrylic acid) 9003-05-8, Polyacrylamide 9003-09-2,  
Poly(vinyl methyl ether) 9003-20-7, Poly(vinyl acetate) 9003-39-8,  
Polyvinylpyrrolidone 24979-70-2, Poly(4-vinylphenol) 25014-12-4,  
Polymethacrylamide 25014-15-7, Poly(2-vinylpyridine) 25087-26-7,  
Poly(methacrylic acid) 25189-55-3, Poly(N-isopropylacrylamide)  
25191-25-7, Poly(vinyl sulfuric acid) 25213-24-5, Vinyl acetate-vinyl

alcohol copolymer 25232-41-1, Poly(4-vinylpyridine) 25322-68-3,  
 Poly(ethylene oxide) 25987-88-6 25987-89-7 26062-79-3,  
 Poly(diallyldimethylammonium chloride) 26099-09-2, Poly(maleic acid)  
 26101-52-0, Poly(ethylenesulfonic Acid) 26336-38-9, Polyvinylamine  
**26793-34-0**, Poly(N,N-dimethylacrylamide) 27754-99-0,  
 Poly(vinylphosphonic acid) 28391-39-1, Poly(4-vinylbenzoic acid)  
 29382-27-2 32555-37-6 **49718-56-1D**, salts 50851-57-5,  
 Poly(styrene sulfonic acid) 57214-11-6 89843-85-6 165043-25-4  
 165043-26-5 165043-27-6

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(prepn. of self-acid-doped sulfonic acid ring-substituted polyaniline in its aq. form, and polymer blends made therefrom)

IT **26793-34-0**, Poly(N,N-dimethylacrylamide) **49718-56-1D**, salts

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(prepn. of self-acid-doped sulfonic acid ring-substituted polyaniline in its aq. form, and polymer blends made therefrom)

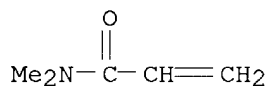
RN 26793-34-0 HCAPLUS

CN 2-Propenamide, N,N-dimethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O



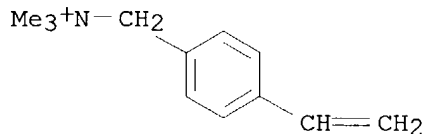
RN 49718-56-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 46231-82-7

CMF C12 H18 N



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 15 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:672476 HCAPLUS

DOCUMENT NUMBER: 129:281021

TITLE: Phosphate-binding polymers combined with a calcium

INVENTOR(S): supplement for oral administration  
 Goldberg, Dennis I.; Burke, Steven K.; Mandeville, W.  
 Harry, III; Holmes-Farley, Stephen Randall;  
 Whitesides, George M.  
 PATENT ASSIGNEE(S): Geltex Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 64 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842355	A1	19981001	WO 1997-US5780	19970408
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9724464	A1	19981020	AU 1997-24464	19970408
PRIORITY APPLN. INFO.:			US 1997-823699	19970325
			WO 1997-US5780	19970408
AB	Phosphate-binding polymers are provided for removing phosphate from the gastrointestinal tract. The polymers are orally administered, and are useful for the treatment of hyperphosphatemia. Compds. demonstrated to effectively remove phosphate were polyethylenimine salts such as sulfate, tartrate, ascorbate, citrate, and succinate. Examples are given for prepn. of these compds. and other polymers such as polyallylamine derivs.			
IC	ICM A61K031-785			
CC	ICS A61K033-10; A61K033-06			
IT	63-6 (Pharmaceuticals)			
	Section cross-reference(s): 35			
	104-78-9DP, N-(3-Diethylaminopropyl)amine, reaction products with divinylbenzene-Me methacrylate copolymer <b>107-15-3DP</b> , 1,2-Ethanediamine, reaction products with divinylbenzene-Me methacrylate copolymer, biological studies 111-40-0DP, reaction products with divinylbenzene-Me methacrylate copolymer 112-24-3DP, Triethylenetetramine, reaction products with divinylbenzene-Me methacrylate copolymer 112-57-2DP, Tetraethylenepentamine, reaction products with divinylbenzene-Me methacrylate copolymer 306-60-5DP, Agmatine, reaction products with N-hydroxysuccinimide acrylate-methylenebisacrylamide copolymer 814-68-6DP, Acryloyl chloride, reaction products with polyethylenimine 2482-00-0DP, Agmatine sulfate, reaction products with poly(methacryloyl chloride) 2582-30-1DP, Aminoguanidine bicarbonate, reaction products with poly(methacryloyl chloride) 4067-16-7DP, Pentaethylenehexamine, reaction products with divinylbenzene-Me methacrylate copolymer 9017-37-2DP, Divinylbenzenemethyl methacrylate copolymer, reaction products with polyamines 25085-17-0P, Epichlorohydrin-diethylenetriamine copolymer 26336-38-9P, Polyvinylamine 34369-44-3P, Epichlorohydrin-pentaethylenehexamine copolymer <b>37339-48-3P</b> 130530-88-0P 132460-82-3P, N-(3-Dimethylaminopropyl)acrylamide-methylenebisacrylamide copolymer 147898-29-1DP, hydrolyzed 161035-25-2DP, reaction products			



with polyamines 162786-36-9DP, Divinylbenzene-methacryloyl chloride  
copolymer, reaction products with polyamines 214040-27-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)

(phosphate-binding polymers combined with a calcium supplement for oral  
administration)

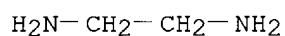
IT **107-15-3DP**, 1,2-Ethanediamine, reaction products with  
divinylbenzene-Me methacrylate copolymer, biological studies  
**37339-48-3P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)

(phosphate-binding polymers combined with a calcium supplement for oral  
administration)

RN 107-15-3 HCAPLUS

CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)



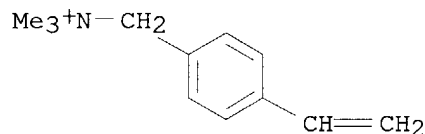
RN 37339-48-3 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl



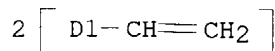
● Cl<sup>-</sup>

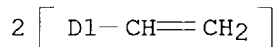
CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS





REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 16 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1998:535186 HCAPLUS  
 DOCUMENT NUMBER: 129:231137  
 TITLE: Polymerizable fluorine-containing polyethers and manufacture thereof  
 INVENTOR(S): Tsuji, Makoto; Nanbu, Hiromi  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10218988	A2	19980818	JP 1997-25101	19970207
PRIORITY APPLN. INFO.:			JP 1997-25101	19970207
AB The title compds. are CH <sub>2</sub> :CHC <sub>6</sub> H <sub>4</sub> CH <sub>2</sub> N <sup>+</sup> (R <sub>2</sub> )(R <sub>3</sub> )R <sub>10</sub> (AO)nR <sub>4</sub> Z <sup>-</sup> , wherein R <sub>1</sub> = C <sub>1</sub> -20 divalent hydrocarbon group with or without O; R <sub>2</sub> , R <sub>3</sub> = H, C <sub>1</sub> -20 alkyl optionally contg. O, -R <sub>10</sub> (AO)nR <sub>4</sub> ; R <sub>1</sub> and R <sub>2</sub> , or R <sub>1</sub> and R <sub>3</sub> may have the same carbon with R <sub>1</sub> , R <sub>2</sub> and R <sub>3</sub> forming C <sub>1</sub> -20 pyridylalkylene group; R <sub>4</sub> = H, C <sub>1</sub> -30 hydrocarbon group with or without O, N, Si or halogen; A = ethylene, propylene, CH <sub>2</sub> CH(CF <sub>3</sub> ); at least 5 of A's being CH <sub>2</sub> CH(CF <sub>3</sub> ); n = 5-2000; Z <sup>-</sup> = anion. P-CH <sub>2</sub> :CHC <sub>6</sub> H <sub>4</sub> CH <sub>2</sub> N <sup>+</sup> Me <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> O[CH <sub>2</sub> CH(CF <sub>3</sub> )O] <sub>22</sub> H Cl <sup>-</sup> was prep'd. by alkoxylation of dimethylethanolamine with trifluoropropylene oxide then reacting with p-chloromethylstyrene.				
IC ICM C08G065-32				
ICS C08F290-06				
CC 35-2 (Chemistry of Synthetic High Polymers)				
IT <b>212692-13-2P</b>				
RL: IMF (Industrial manufacture); PREP (Preparation) (polymerizable fluorine-contg. polyethers and manuf. thereof)				
IT 212625-51-9P 212625-52-0P 212626-77-2P <b>212716-43-3P</b>				
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (polymerizable fluorine-contg. polyethers and manuf. thereof)				
IT <b>212692-13-2P</b>				
RL: IMF (Industrial manufacture); PREP (Preparation) (polymerizable fluorine-contg. polyethers and manuf. thereof)				
RN 212692-13-2 HCAPLUS				
CN 2-Propenamide, N,N-dimethyl-, polymer with .alpha.-[2-[[[4-ethenylphenyl)methyl]dimethylammonio]ethyl]-.omega.-hydroxypoly[oxy[(trifluoromethyl)-1,2-ethanediy]] chloride (9CI) (CA				

INDEX NAME)

CM 1

CRN 212626-77-2

CMF (C3 H3 F3 O)<sub>n</sub> C13 H20 N O . Cl

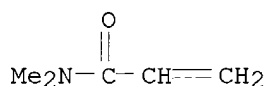
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 2680-03-7

CMF C5 H9 N O

IT **212716-43-3P**

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
(Reactant or reagent)  
(polymerizable fluorine-contg. polyethers and manuf. thereof)

RN 212716-43-3 HCAPLUS

CN Oxirane, (trifluoromethyl)-, polymer with oxirane, mono[2-[[[4-  
ethenylphenyl)methyl]dimethylammonio]ethyl] ether, chloride (9CI) (CA  
INDEX NAME)

CM 1

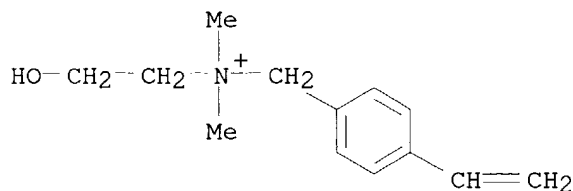
CRN 212612-37-8

CMF C13 H20 N O . (C3 H3 F3 O . C2 H4 O)<sub>x</sub>

CM 2

CRN 88353-54-2

CMF C13 H20 N O



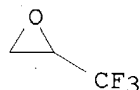
CM 3

CRN 143223-28-3

CMF (C3 H3 F3 O . C2 H4 O)<sub>x</sub>

CCI PMS

CM 4

CRN 359-41-1  
CMF C3 H3 F3 O

CM 5

CRN 75-21-8  
CMF C2 H4 O

L47 ANSWER 17 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:762022 HCAPLUS

DOCUMENT NUMBER: 128:95285

TITLE: Silver halide photographic material providing high-contrast images

INVENTOR(S): Nishi, Kenichi; Haino, Kozo

PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09304858	A2	19971128	JP 1996-121485	19960516
PRIORITY APPLN. INFO.:			JP 1996-121485	19960516

OTHER SOURCE(S): MARPAT 128:95285

AB The material contains .gtoreq.1 polymer contg. LP+R1R2R3.X- [R1-3 = (substituted) alkyl, alkenyl, aryl, heterocycle; X = anion; L = linking group] and .gtoreq.1 hydrazine deriv. R1NA1NA2G1R2 (A1-2 = H, sulfonyl, acyl; R1 = aliph., arom., or heterocyclic group; G1 = carbonyl, sulfonyl, sulfoxy, phosphoryl, oxalyl, iminomethylene; R2 = .gtoreq.1 electron-attractive group-substituted alkyl) in .gtoreq.1 photosensitive Ag halide emulsion layer and/or other hydrophilic colloid layers. The material gave high-contrast and low-fog images even when processed with a developing soln. of pH <11.0.

IC ICM G03C001-06

ICS G03C001-035; G03C001-295; G03C001-36

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 164012-78-6 **195144-14-0** 195144-22-0 **200943-12-0**

200943-13-1 200943-14-2 200943-15-3 200943-16-4

RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)(silver halide photog. material contg. phosphonium salt-contg. polymer  
nucleating agent)IT **195144-14-0 200943-12-0**RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)(silver halide photog. material contg. phosphonium salt-contg. polymer  
nucleating agent)

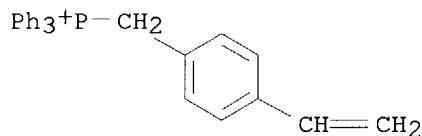
RN 195144-14-0 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]triphenyl-, chloride, polymer with  
2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 47562-35-6

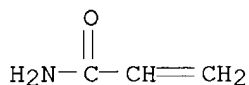
CMF C27 H24 P . Cl

● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



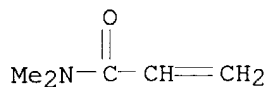
RN 200943-12-0 HCAPLUS

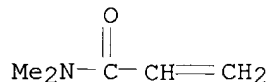
CN Phosphonium, [2-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]ethyl]triphenyl-,  
salt with 4-methylbenzenesulfonic acid (1:1), polymer with  
N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O





CM 2

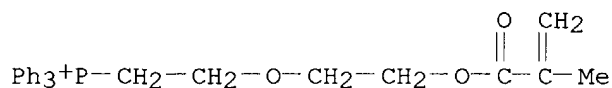
CRN 200943-11-9

CMF C26 H28 O3 P . C7 H7 O3 S

CM 3

CRN 200943-10-8

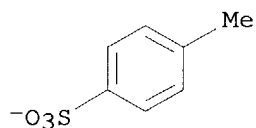
CMF C26 H28 O3 P



CM 4

CRN 16722-51-3

CMF C7 H7 O3 S



L47 ANSWER 18 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:715662 HCAPLUS

DOCUMENT NUMBER: 128:28587

TITLE: Silver halide photographic material useful in printing  
platemaking

INVENTOR(S): Nishi, Kenichi; Haino, Kozo

PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

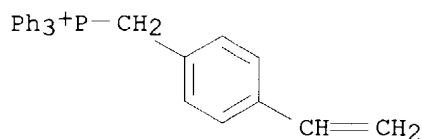
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09281622	A2	19971031	JP 1996-93763	19960416
PRIORITY APPLN. INFO.:			JP 1996-93763	19960416
OTHER SOURCE(S):		MARPAT 128:28587		

AB The title material possesses .gtoreq.1 Ag halide emulsion layer comprising

Ag halide grains with av. grain size  $\leq 0.1 \mu\text{m}$  of which the AgCl content is  $\geq 90 \text{ mol}\%$  and which contain a water-sol. Rh salt  $1 \times 10^{-6}$  to  $1 \times 10^{-4} \text{ mol/mol}$  Ag on a support and contains  $\geq 1$  compd.  $(R1R2R3P^+)tY1.(t/u)Xlu^-$  [ $R1-13 = \text{alkyl, cycloalkyl, aryl, alkenyl, cycloalkenyl, heterocycle residue}$  (these groups may be substituted);  $t = \text{pos. integer}$ ;  $Y1 = \text{org. group with } t\text{-valence(s) of which the C atom links to the P atom}$ ;  $u = 1-3$ ;  $X1 = \text{anion with } u\text{-valence(s)}$ ,  $X1$  and  $Y1$  may link] or  $\geq 1$  polymer having a structure  $Y2(P+R21R22R23)(X2)-$  [ $R21-23 = \text{alkyl, alkenyl, aryl, heterocycle}$  (these groups may be substituted);  $X2 = \text{anion}$ ;  $Y2 = \text{linking group}$ ] and  $\geq 1$  compd.  $R1SO2NHLNA1NA2G1R2$  [both of  $A1$  and  $A2$  are H or 1 of them is H and the other is sulfonyl or acyl group;  $R1 = \text{aliph., arom. or heterocyclic group}$ ;  $L = \text{divalent org. group}$ ;  $G1 = \text{carbonyl, sulfonyl, sulfoxy, phosphoryl, oxalyl, iminomethylene}$ ;  $R2 = \text{aliph. or arom. group, alkoxy, aryloxy, amino}$ ,  $Q+A^-$  ( $Q^+ = \text{cationic group-contg. group}$ ;  $A^- = \text{anion, when } Q^+ \text{ contains sulfo group, } A^- \text{ is not necessary}$ )] in the emulsion layer or other hydrophilic colloid layer. The material useful in printing platemaking shows high contrast even upon development with developers of pH  $< 11.0$  and improved resistance to safelight.

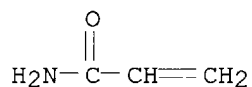
- IC ICM G03C001-04  
ICS G03C001-035; G03C001-053; G03C001-06; G03C001-36
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- IT 1519-47-7 1530-32-1, Ethyltriphenylphosphonium bromide 2001-45-8, Tetraphenylphosphonium chloride **195144-14-0** 195144-22-0 198137-70-1 **199456-88-7**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(photog. film contg. hydrazine deriv. or phosphonium compd.)
- IT **199456-85-4P**  
RL: DEV (Device component use); MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
(photog. film contg. hydrazine deriv. or phosphonium compd.)
- IT **195144-14-0 199456-88-7**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(photog. film contg. hydrazine deriv. or phosphonium compd.)
- RN 195144-14-0 HCAPLUS
- CN Phosphonium, [(4-ethenylphenyl)methyl]triphenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)
- CM 1
- CRN 47562-35-6
- CMF C27 H24 P . Cl



CM 2

CRN 79-06-1

CMF C3 H5 N O



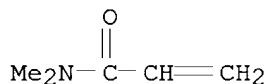
RN 199456-88-7 HCAPLUS

CN 4,7,10,13-Tetraoxa-1-phosphoniahexadec-15-ene, 15-methyl-14-oxo-1,1,1-triphenyl-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O



CM 2

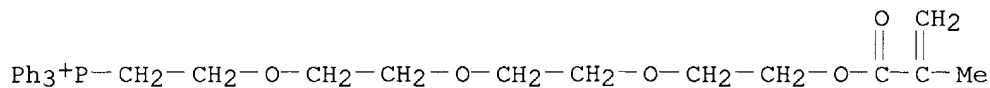
CRN 199456-87-6

CMF C30 H36 O5 P . C7 H7 O3 S

CM 3

CRN 199456-86-5

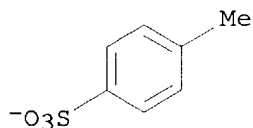
CMF C30 H36 O5 P



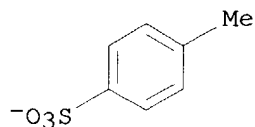
CM 4

CRN 16722-51-3

CMF C7 H7 O3 S





IT **199456-85-4P**

RL: DEV (Device component use); MOA (Modifier or additive use); PNU  
(Preparation, unclassified); PREP (Preparation); USES (Uses)  
(photog. film contg. hydrazine deriv. or phosphonium compd.)

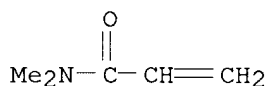
RN 199456-85-4 HCAPLUS

CN Phosphonium, [5-[(2-methyl-1-oxo-2-propenyl)oxy]pentyl]triphenyl-, salt  
with 4-methylbenzenesulfonic acid (1:1), polymer with N,N-dimethyl-2-  
propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O



CM 2

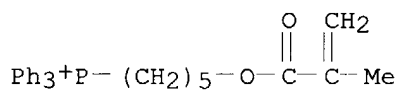
CRN 199456-84-3

CMF C27 H30 O2 P . C7 H7 O3 S

CM 3

CRN 199456-83-2

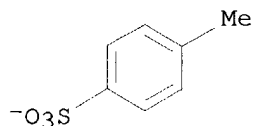
CMF C27 H30 O2 P



CM 4

CRN 16722-51-3

CMF C7 H7 O3 S



L47 ANSWER 19 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:526284 HCAPLUS

DOCUMENT NUMBER: 127:227406

TITLE: Silver halide photographic material and the method for processing the material utilizing phosphonium compound

INVENTOR(S): Haino, Kozo; Koga, Masao; Kaneko, Satoshi; Furukawa, Akira

PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09203988	A2	19970805	JP 1996-11362	19960126
JP 3429940	B2	20030728		

PRIORITY APPLN. INFO.: JP 1996-11362 19960126

AB Claimed method comprises processing the material in presence of a polymer contg. a phosphonium group  $\text{Ln}(\text{PR}_1\text{R}_2\text{R}_3)\text{X}$  ( $\text{R}_1\text{-3}$  = alkyl, alkenyl, aryl; heterocyclic group;  $\text{X}$  = anion,  $\text{L}$  = linkage group;  $n = 0, 1$ ). Also claimed is the photog. material contg. a hydrazine in an emulsion layer or in other hydrophilic colloid layer and also contg. the above phosphonium derivs. The phosphonium derivs. are contrast-enhancing accelerator, and provides an image with high contrast even at low pH, also reduces black peppers, and improves the consistency of photog. quality of processed films. Suitable phosphonium to be incorporated in graphic arts films are triphenylphosphohexyl ester of methacrylic acid/acrylamide copolymer, triphenylphosphooctyl ester of methacrylic acid/acrylamide copolymer and triphenylphospho-ethoxyethoxyethyl ester of methacrylic acid/acryldimethylamide copolymer and suitable hydrazines are 1-(1-diethylamino-2-pentylamino-oxalyl)-2-[4-(n-octyloxysulfoamino)phenyl]hydrazine and 1-(diethylaminopropylamino-oxalyl)-2-[4-[2-(phenylthio)propioamido]phenyl]hydrazine. The material can be processed by the PQ developer having the pH of 10.5.

IC ICM G03C001-06

ICS G03C001-04; G03C001-295; G03C005-29; G03C005-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **195144-14-0** 195144-16-2 **195144-19-5** 195144-22-0

195144-25-3 195144-27-5

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(photog. lith film and its processing utilizing contrast-enhancing phosphonium compd.)

IT **195144-14-0** **195144-19-5**

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(photog. lith film and its processing utilizing contrast-enhancing phosphonium compd.)

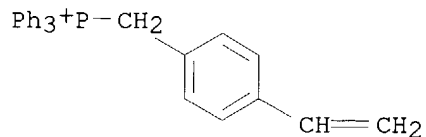
RN 195144-14-0 HCAPLUS

CN Phosphonium, [(4-ethenylphenyl)methyl]triphenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 47562-35-6

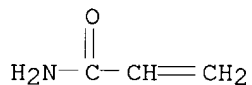
CMF C27 H24 P . Cl

●  $\text{Cl}^-$ 

CM 2

CRN 79-06-1

CMF C3 H5 N O



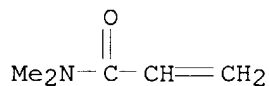
RN 195144-19-5 HCAPLUS

CN Phosphonium, [6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]triphenyl-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O



CM 2

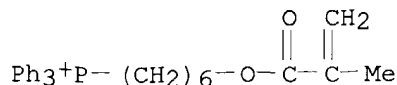
CRN 195144-18-4

CMF C28 H32 O2 P . C7 H7 O3 S

CM 3

CRN 195144-17-3

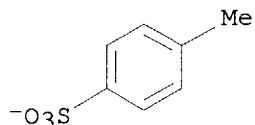
CMF C28 H32 O2 P



CM 4

CRN 16722-51-3

CMF C7 H7 O3 S



L47 ANSWER 20 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:257190 HCAPLUS

DOCUMENT NUMBER: 126:244868

TITLE: Recording material for ink-jet printing

INVENTOR(S): Ikeda, Mitsuhiro; Suzuki, Katsumitsu; Kato, Makoto

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09030112	A2	19970204	JP 1995-184082	19950720
PRIORITY APPLN. INFO.:			JP 1995-184082	19950720
AB In the title recording material having an ink-absorbing layer, the ink-absorbing layer is a 3-dimensionally crosslinked layer of a water-sol. amphoteric polymer with an aziridine crosslinker. Specified anionic and cationic monomers are also claimed. The support of the recording material is a polyester film or a resin-coated paper. The invention can prevent image damages caused by water-drop and produce images with photog. picture-like gloss.				
IC ICM B41M005-00				
ICS B05D005-04; B05D007-04; D21H019-16				
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)				
IT 192008-82-5P 192008-83-6P 192008-84-7P				
192008-85-8P 192008-86-9P 192008-87-0P				
192008-88-1P 192008-89-2P 192008-90-5P				
192008-91-6P 192008-92-7P 192008-93-8P				
192008-94-9P 192008-95-0P 192008-96-1P				
192008-97-2P 192008-98-3P 192008-99-4P				
192009-00-0P 192009-01-1P 192009-02-2P 192009-03-3P				
192009-04-4P 192009-05-5P 192009-06-6P 192082-52-3P				
192082-53-4P 192082-54-5P 192082-55-6P				

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepd. for forming 3-dimensionally crosslinked ink-absorbing layer for ink-jet recording material)

IT 192008-82-5P 192008-83-6P 192008-84-7P  
 192008-85-8P 192008-86-9P 192008-88-1P  
 192008-89-2P 192008-91-6P 192008-93-8P  
 192008-94-9P 192008-95-0P 192008-96-1P  
 192008-97-2P 192008-98-3P 192008-99-4P  
 192009-01-1P 192009-03-3P 192009-06-6P  
 192082-53-4P 192082-54-5P 192082-55-6P

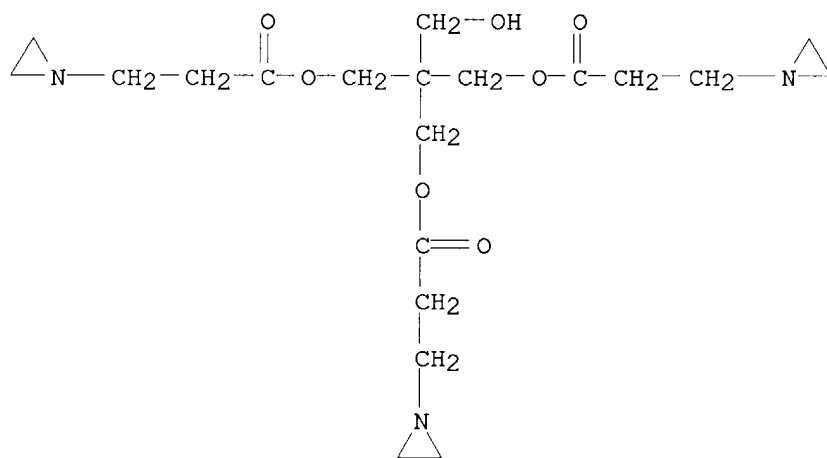
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepd. for forming 3-dimensionally crosslinked ink-absorbing layer for ink-jet recording material)

RN 192008-82-5 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

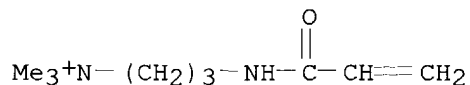
CMF C20 H33 N3 O7



CM 2

CRN 45021-77-0

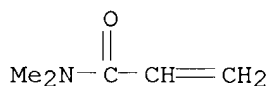
CMF C9 H19 N2 O . Cl



CM 3

CRN 2680-03-7

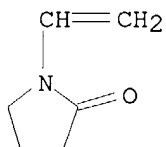
CMF C5 H9 N O



CM 4

CRN 88-12-0

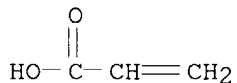
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



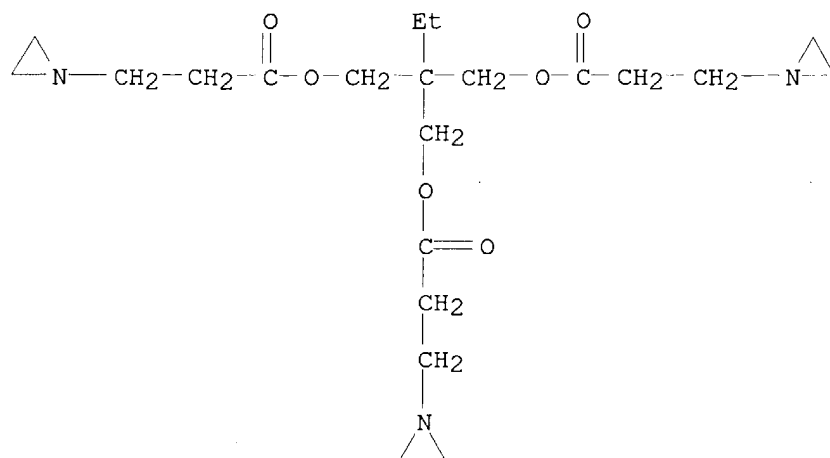
RN 192008-83-6 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[[3-(1-aziridiny)-1-oxopropoxy]methyl]-2-ethyl-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 52234-82-9

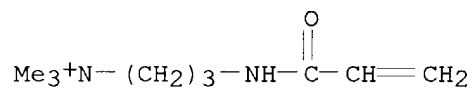
CMF C21 H35 N3 O6



CM 2

CRN 45021-77-0

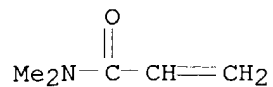
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

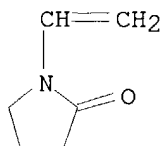
CMF C5 H9 N O



CM 4

CRN 88-12-0

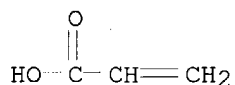
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



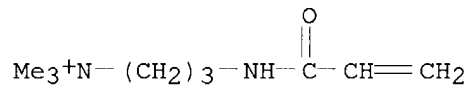
RN 192008-84-7 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, N,N'-1,6-hexanediylbis[1-aziridinecarboxamide] and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

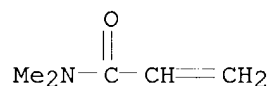
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2680-03-7

CMF C5 H9 N O

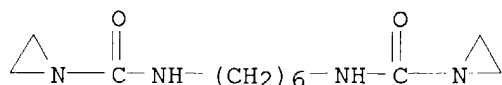


CM 3

CRN 2271-93-4

CMF C12 H22 N4 O2

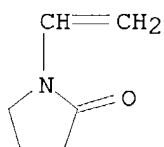




CM 4

CRN 88-12-0

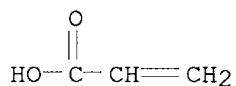
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



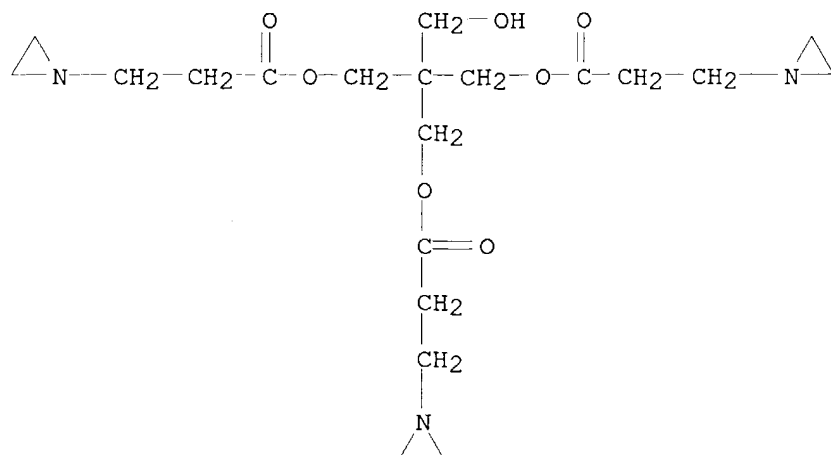
RN 192008-85-8 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

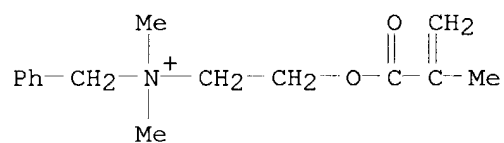
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

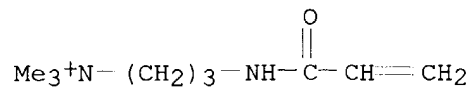
CMF C15 H22 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

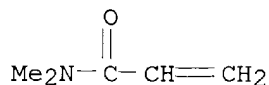
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 2680-03-7

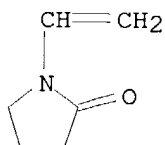
CMF C5 H9 N O



CM 5

CRN 88-12-0

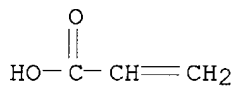
CMF C6 H9 N O



CM 6

CRN 79-10-7

CMF C3 H4 O2



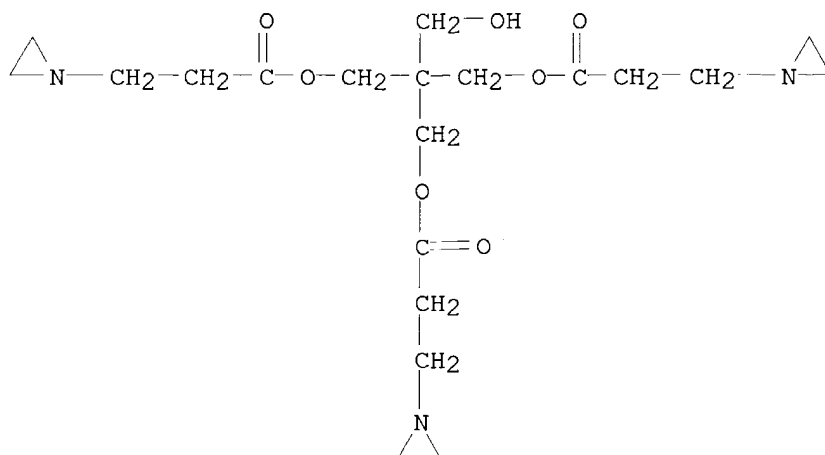
RN 192008-86-9 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, 2-methoxyethyl 2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

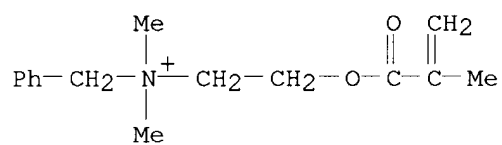
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

CMF C15 H22 N O2 . C1

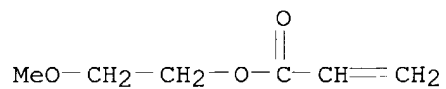


● C1-

CM 3

CRN 3121-61-7

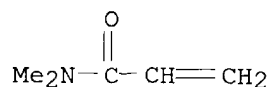
CMF C6 H10 O3



CM 4

CRN 2680-03-7

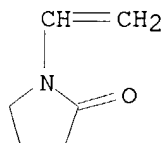
CMF C5 H9 N O



CM 5

CRN 88-12-0

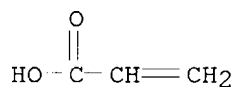
CMF C6 H9 N O



CM 6

CRN 79-10-7

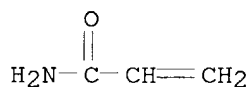
CMF C3 H4 O2



CM 7

CRN 79-06-1

CMF C3 H5 N O



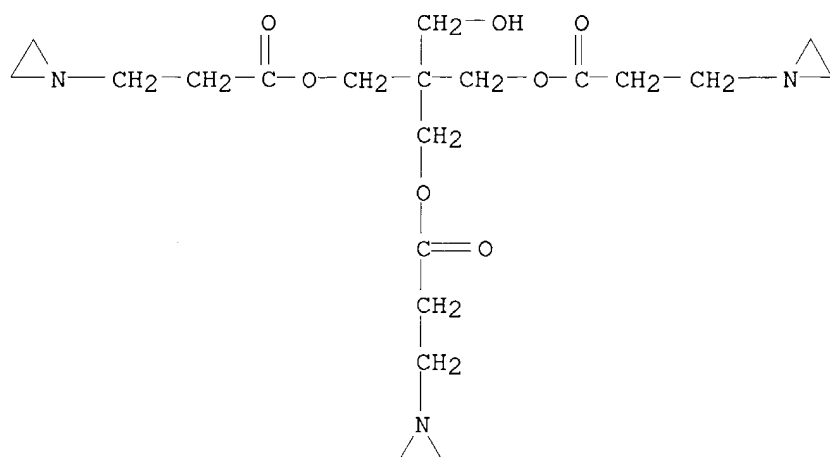
RN 192008-88-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 2-methyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

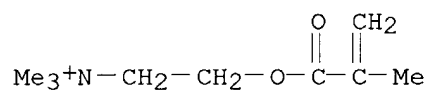
CMF C20 H33 N3 O7



CM 2

CRN 5039-78-1

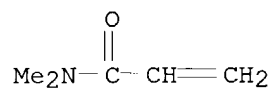
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

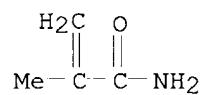
CMF C5 H9 N O



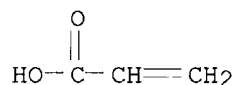
CM 4

CRN 79-39-0

CMF C4 H7 N O



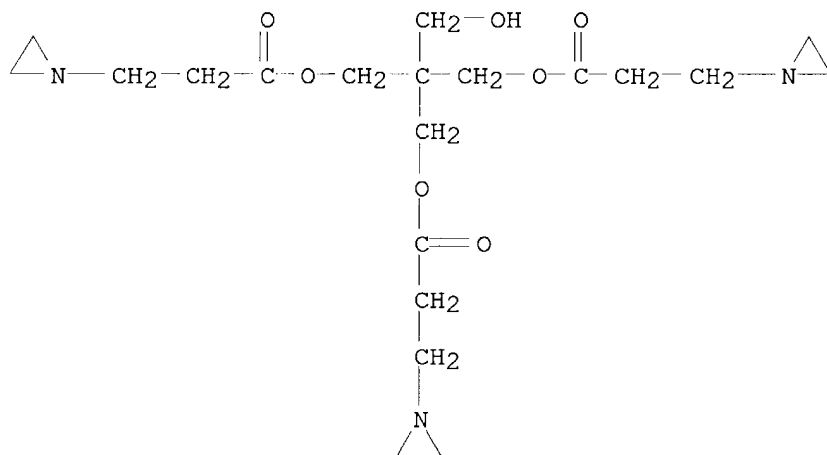
CM 5

CRN 79-10-7  
CMF C3 H4 O2

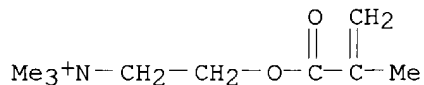
RN 192008-89-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7  
CMF C20 H33 N3 O7

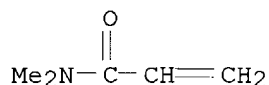
CM 2

CRN 5039-78-1  
CMF C9 H18 N O2 . Cl● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

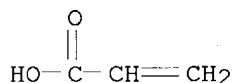
CMF C5 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



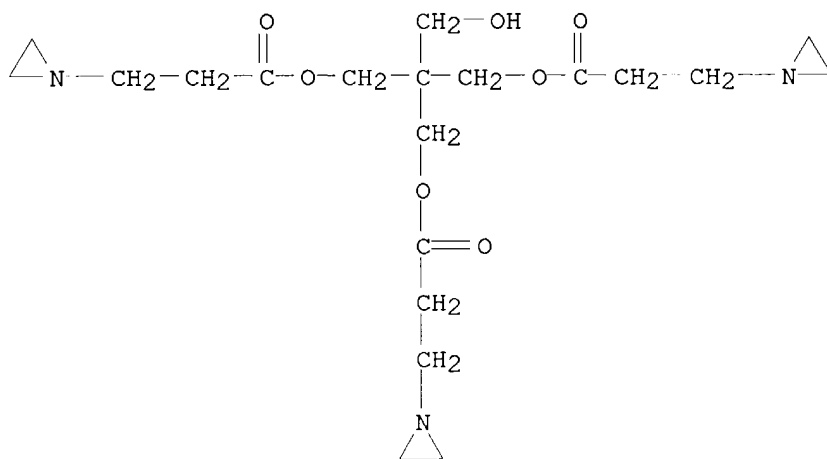
RN 192008-91-6 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, N-(hydroxymethyl)-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

CMF C20 H33 N3 O7

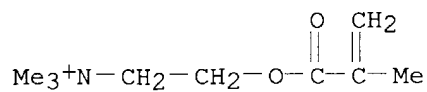




CM 2

CRN 5039-78-1

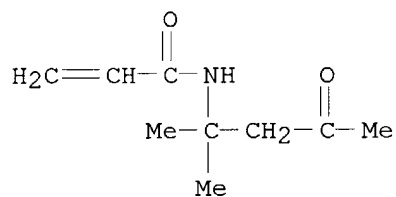
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 2873-97-4

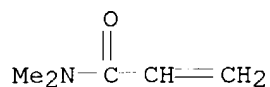
CMF C9 H15 N O2



CM 4

CRN 2680-03-7

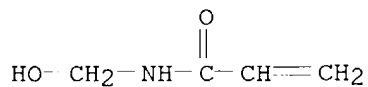
CMF C5 H9 N O



CM 5

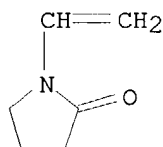
CRN 924-42-5

CMF C4 H7 N O2



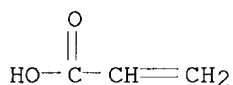
CM 6

CRN 88-12-0  
CMF C6 H9 N O



CM 7

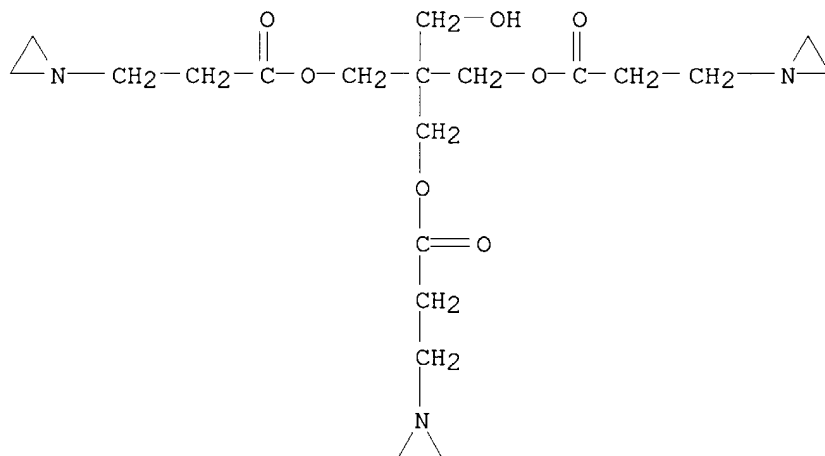
CRN 79-10-7  
CMF C3 H4 O2



RN 192008-93-8 HCAPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 2-methoxyethyl 2-propenoate, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

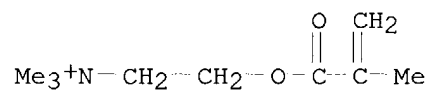
CM 1

CRN 57116-45-7  
CMF C20 H33 N3 O7



CM 2

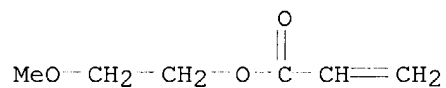
CRN 5039-78-1  
 CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

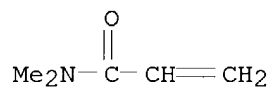
CM 3

CRN 3121-61-7  
 CMF C6 H10 O3



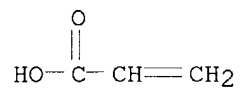
CM 4

CRN 2680-03-7  
 CMF C5 H9 N O



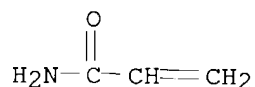
CM 5

CRN 79-10-7  
 CMF C3 H4 O2



CM 6

CRN 79-06-1  
 CMF C3 H5 N O



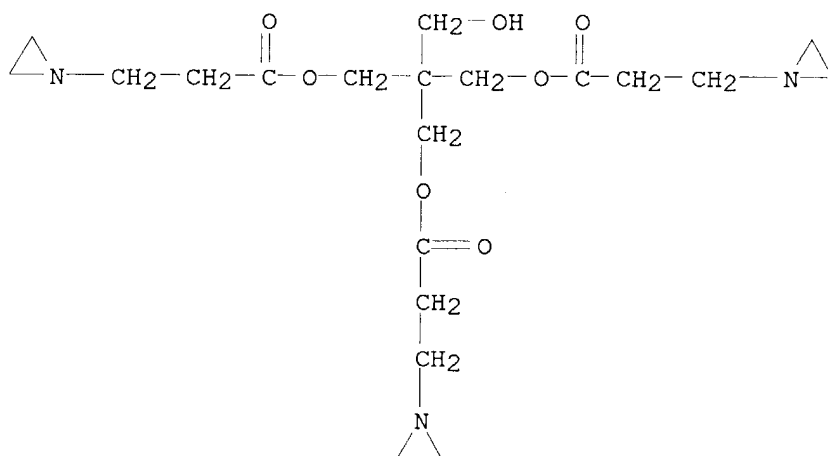
RN 192008-94-9 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

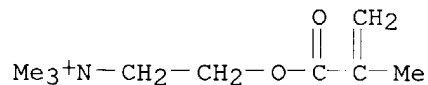
CMF C20 H33 N3 O7



CM 2

CRN 5039-78-1

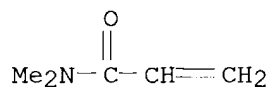
CMF C9 H18 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

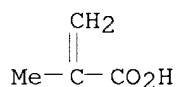
CMF C5 H9 N O



CM 4

CRN 79-41-4

CMF C4 H6 O2



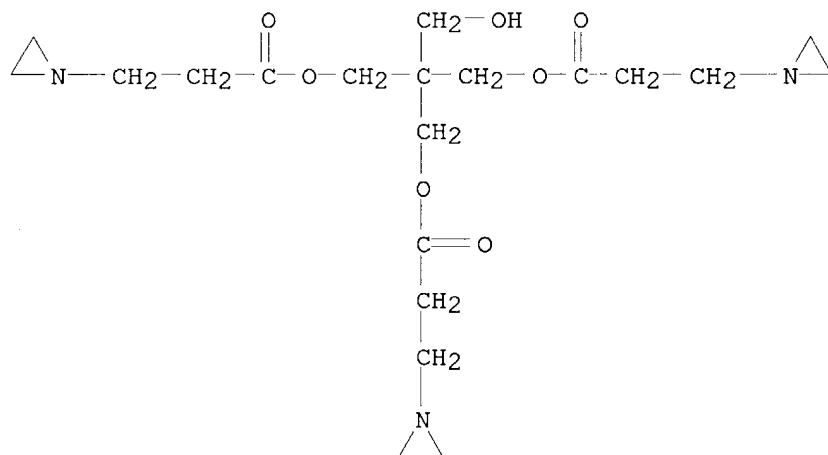
RN 192008-95-0 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

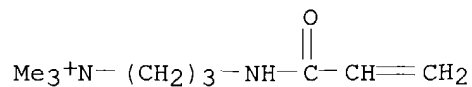
CMF C20 H33 N3 O7



CM 2

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

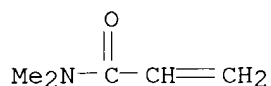


● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

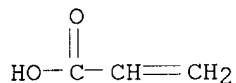
CMF C5 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



RN 192008-96-1 HCAPLUS

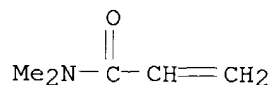
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

CMF C20 H33 N3 O7

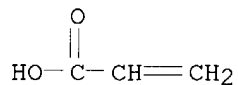




CM 5

CRN 79-10-7

CMF C3 H4 O2



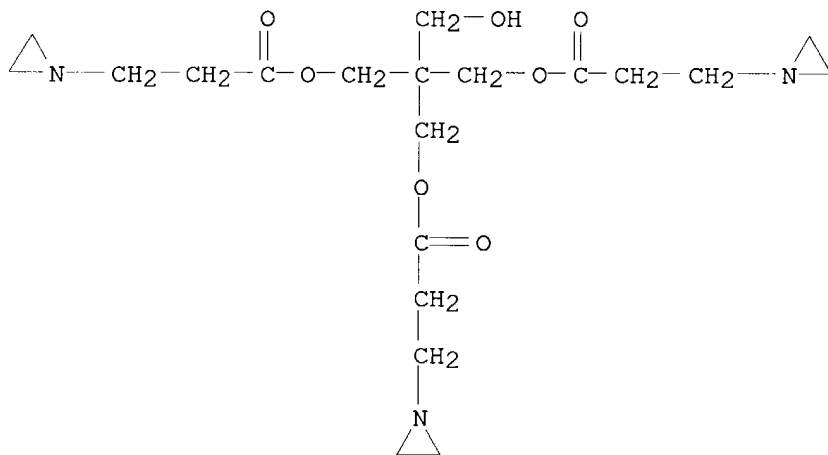
RN 192008-97-2 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

CMF C20 H33 N3 O7

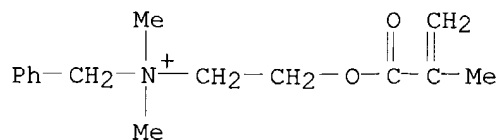


CM 2

CRN 46917-07-1

CMF C15 H22 N O2 . Cl

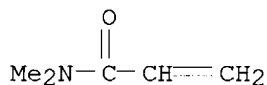




CM 3

CRN 2680-03-7

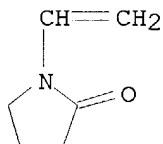
CMF C5 H9 N O



CM 4

CRN 88-12-0

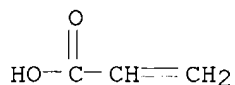
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2

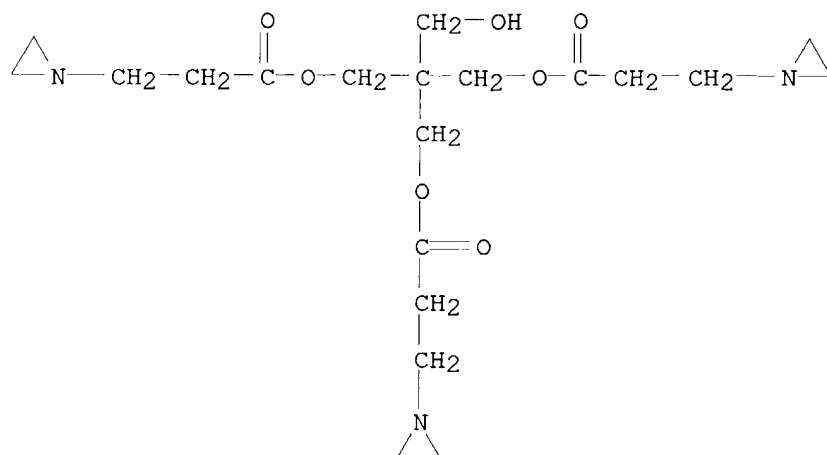


RN 192008-98-3 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

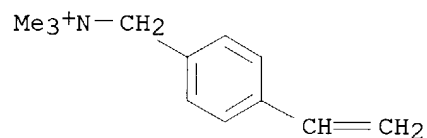
CM 1

CRN 57116-45-7  
CMF C20 H33 N3 O7



CM 2

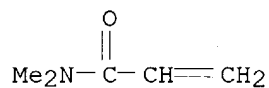
CRN 7538-38-7  
CMF C12 H18 N . Cl



● Cl<sup>-</sup>

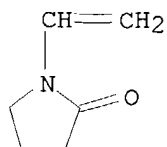
CM 3

CRN 2680-03-7  
CMF C5 H9 N O



CM 4

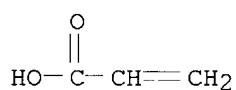
CRN 88-12-0  
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



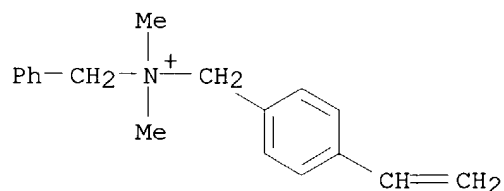
RN 192008-99-4 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 2-[[3-(1-aziridiny)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 66099-76-1

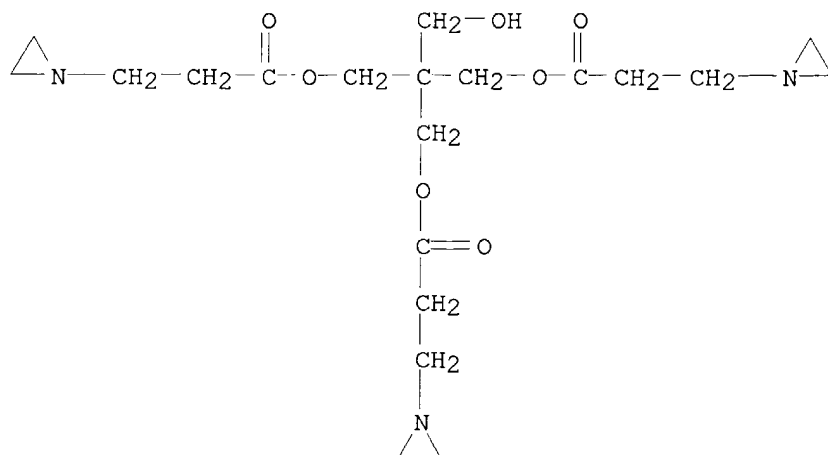
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 57116-45-7

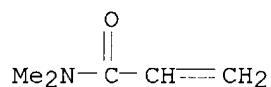
CMF C20 H33 N3 O7



CM 3

CRN 2680-03-7

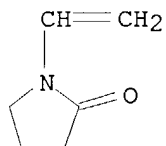
CMF C5 H9 N O



CM 4

CRN 88-12-0

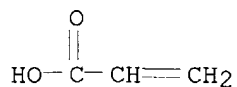
CMF C6 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



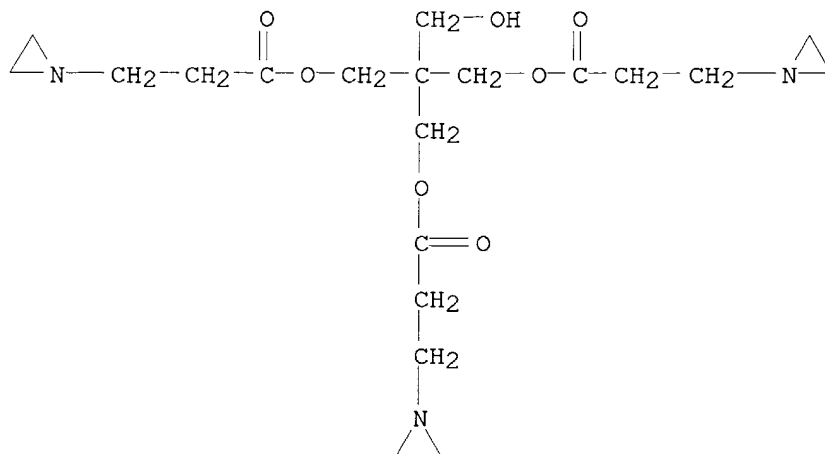
RN 192009-01-1 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

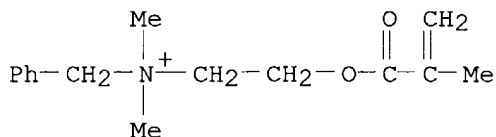
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

CMF C15 H22 N O2 . Cl

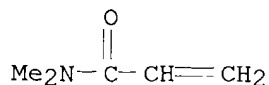


● Cl<sup>-</sup>

CM 3

CRN 2680-03-7

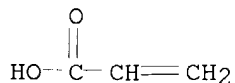
CMF C5 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



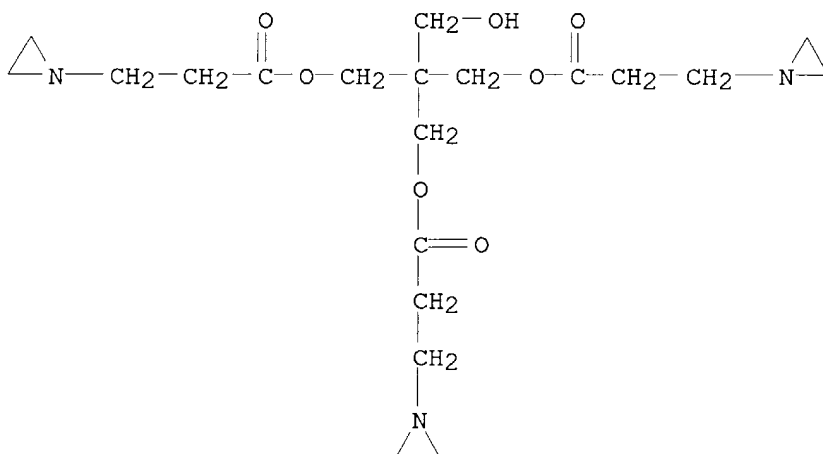
RN 192009-03-3 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

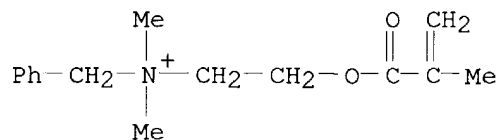
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

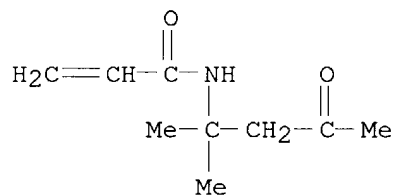
CMF C15 H22 N O2 . C1



CM 3

CRN 2873-97-4

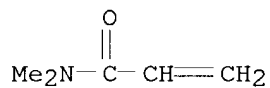
CMF C9 H15 N O2



CM 4

CRN 2680-03-7

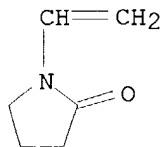
CMF C5 H9 N O



CM 5

CRN 88-12-0

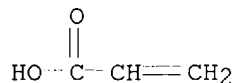
CMF C6 H9 N O



CM 6

CRN 79-10-7

CMF C3 H4 O2



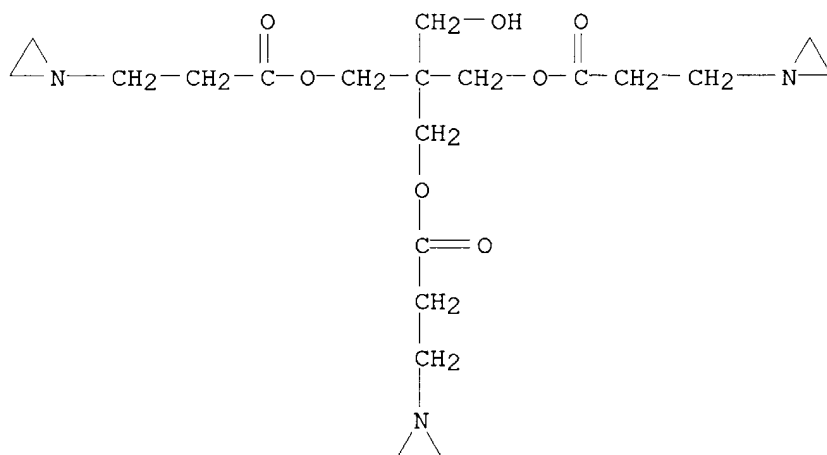
RN 192009-06-6 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

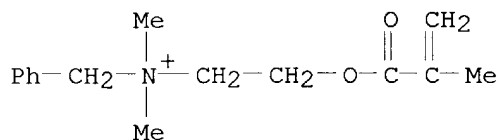
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

CMF C15 H22 N O2 . Cl

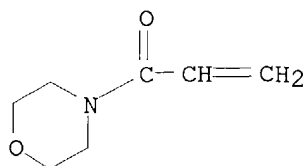
● Cl<sup>-</sup>



CM 3

CRN 5117-12-4

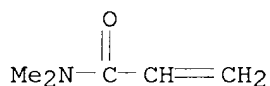
CMF C7 H11 N O2



CM 4

CRN 2680-03-7

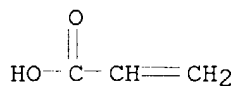
CMF C5 H9 N O



CM 5

CRN 79-10-7

CMF C3 H4 O2



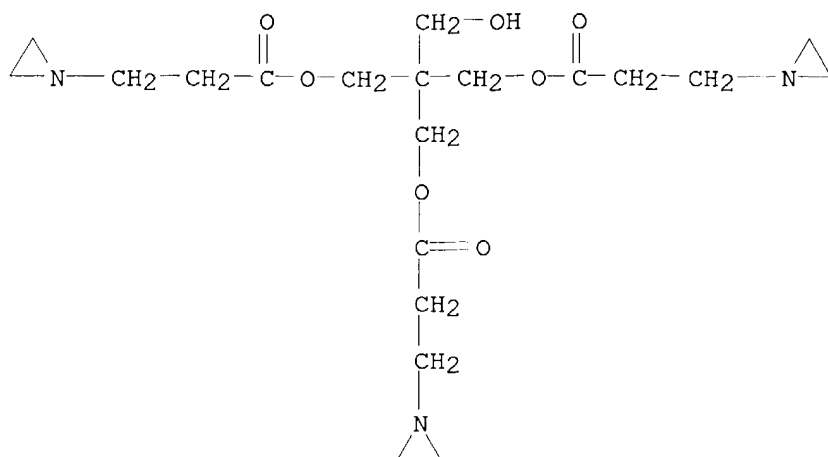
RN 192082-53-4 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-[[3-(1-aziridiny)-1-oxopropoxy)methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 57116-45-7

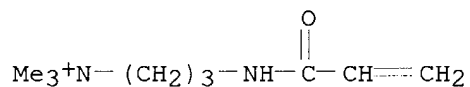
CMF C20 H33 N3 O7



CM 2

CRN 45021-77-0

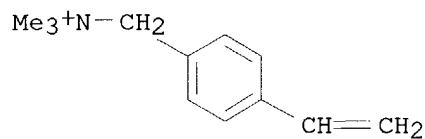
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 7538-38-7

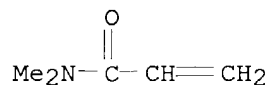
CMF C12 H18 N . Cl

● Cl<sup>-</sup>

CM 4

CRN 2680-03-7

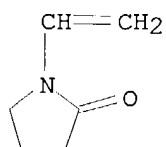
CMF C5 H9 N O



CM 5

CRN 88-12-0

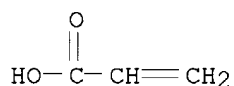
CMF C6 H9 N O



CM 6

CRN 79-10-7

CMF C3 H4 O2



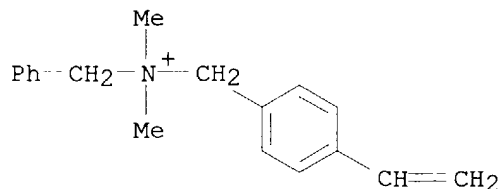
RN 192082-54-5 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 2-[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

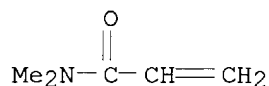
CRN 66099-76-1

CMF C18 H22 N . Cl

● Cl<sup>-</sup>

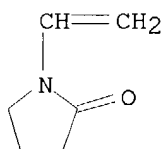


CRN 2680-03-7  
CMF C5 H9 N O



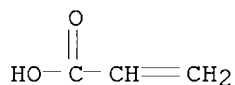
CM 5

CRN 88-12-0  
CMF C6 H9 N O



CM 6

CRN 79-10-7  
CMF C3 H4 O2

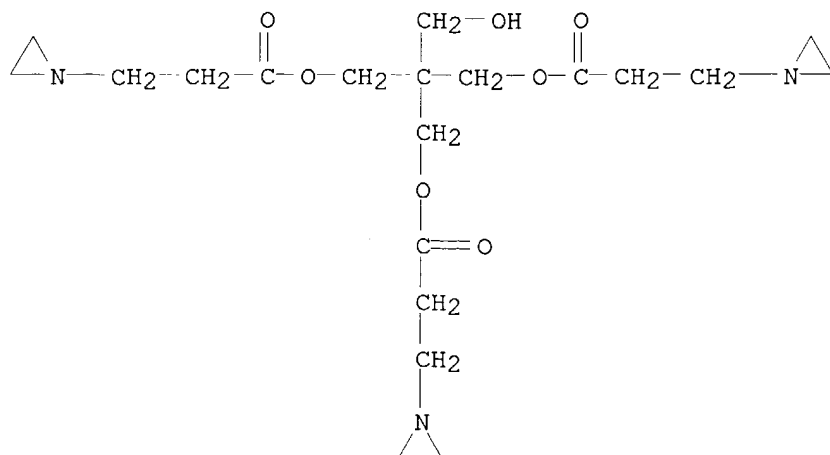


RN 192082-55-6 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-[[3-(1-aziridiny)-1-oxopropoxy)methyl]-2-(hydroxymethyl)-1,3-propanediyl bis(1-aziridinepropanoate), N,N-dimethyl-2-propenamide, 1-ethenyl-2-pyrrolidinone, 4-ethenyl-N,N,N-trimethylbenzenemethanaminium chloride, 2-propenoic acid and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

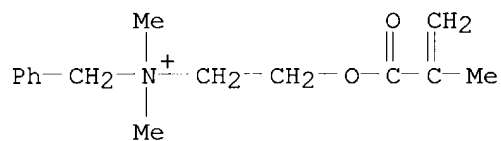
CRN 57116-45-7  
CMF C20 H33 N3 O7



CM 2

CRN 46917-07-1

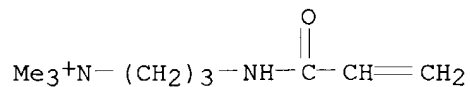
CMF C15 H22 N O2 . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

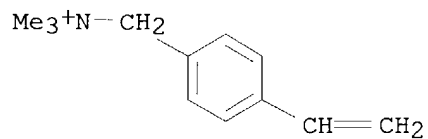
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

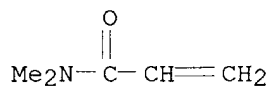
CM 4

CRN 7538-38-7

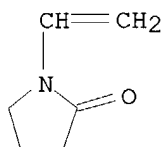
CMF C12 H18 N . Cl



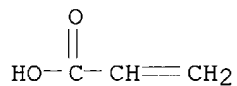
CM 5

CRN 2680-03-7  
CMF C5 H9 N O

CM 6

CRN 88-12-0  
CMF C6 H9 N O

CM 7

CRN 79-10-7  
CMF C3 H4 O2

L47 ANSWER 21 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1997:107379 HCAPLUS  
 DOCUMENT NUMBER: 126:113181  
 TITLE: Phosphate-binding polymers for oral administration  
 INVENTOR(S): Holmes-Farley, Stephen Randall; Mandeville, W. Harry,

PATENT ASSIGNEE(S): III; Whitesides, George M.  
 SOURCE: Geltex Pharmaceuticals, Inc., USA  
 PCT Int. Appl., 43 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9639156	A2	19961212	WO 1996-US8529	19960603
WO 9639156	A3	19970327		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
US 5667775	A	19970916	US 1995-471747	19950606
AU 9659742	A1	19961224	AU 1996-59742	19960603
EP 831857	A2	19980401	EP 1996-917049	19960603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11512074	T2	19991019	JP 1997-501099	19960603
NZ 309548	A	20000728	NZ 1996-309548	19960603
PRIORITY APPLN. INFO.:				
US 1995-471747 A 19950606				
US 1993-105591 B2 19930811				
US 1994-238458 A2 19940505				
WO 1996-US8529 W 19960603				
AB	Phosphate-binding polymers are provided for removing phosphate from the gastrointestinal tract. The polymers are orally administered, and are useful for the treatment of hyperphosphatemia. Polymers were tested by stirring them in a phosphate-contg. soln. at pH 7 for 3 h. Among various polymers tested, best results were obtained with poly(allylamine-epichlorohydrin), poly(allylamine-butanediol diglycidyl ether), poly(allylamine-ethanediol diglycidyl ether), and polyethyleneimine, binding 3.2, 2.7, 2.3, and 2.7 meq/g phosphate.			
IC	ICM A61K031-785			
CC	1-9 (Pharmacology)			
	Section cross-reference(s): 35, 63			
IT	50-81-7DP, Ascorbic acid, reaction products with polyethyleneimine-epichlorohydrin 77-92-9DP, Citric acid, reaction products with polyethyleneimine-epichlorohydrin 87-69-4DP, reaction products with polyethyleneimine-epichlorohydrin, biological studies 104-78-9DP, reaction products with poly(Me methacrylate-co-divinylbenzene) 106-89-8DP, reaction products with poly(ethyleneimine) <b>107-15-3DP</b> , 1,2-Ethanediamine, reaction products with poly(Me methacrylate-co-divinylbenzene), biological studies 110-15-6DP, Butanedioic acid, reaction products with polyethyleneimine-epichlorohydrin, biological studies 111-40-0DP, Diethylenetriamine, reaction products with poly(Me methacrylate-co-divinylbenzene) 112-24-3DP, reaction products with poly(Me methacrylate-co-divinylbenzene) 112-57-2DP, Tetraethylenepentamine, reaction products with poly(Me methacrylate-co-divinylbenzene) 306-60-5DP, Agmatine, reaction products with acrylate copolymer 814-68-6DP, Acryloyl chloride, reaction products with poly(ethyleneimine) 2482-00-0DP, Agmatine sulfate, reaction			



products with poly(methacryloyl chloride) 2582-30-1DP, Aminoguanidine bicarbonate, reaction products with poly(methacryloyl chloride) 4067-16-7DP, Pentaethylenehexamine, reaction products with poly(Me methacrylate-co-divinylbenzene) 9002-98-6DP, reaction products with acryloyl chloride or epichlorohydrin 9017-37-2DP, Divinylbenzenemethyl methacrylate copolymer, reaction products with amines 25085-17-0P, Diethylenetriamine-epichlorohydrin copolymer 26336-38-9P, Poly(vinylamine) 26913-06-4DP, Poly[imino(1,2-ethanediy)], reaction products with acryloyl chloride or epichlorohydrin 26937-45-1DP, Poly(methacryloyl chloride), reaction products with agmatine or aminoguanidine 34369-44-3P, Epichlorohydrin-pentaethylenehexamine copolymer **37339-48-3P** 52757-95-6P, Allylamine-epichlorohydrin copolymer 57491-00-6P 124012-04-0P 130530-88-0P 132460-82-3P 161035-25-2DP, reaction products with agmatine 162786-25-6P 162786-42-7P 186132-71-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oral phosphate-binding polymers for treatment of hyperphosphatemia)  
IT **107-15-3DP**, 1,2-Ethanediamine, reaction products with poly(Me methacrylate-co-divinylbenzene), biological studies **37339-48-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oral phosphate-binding polymers for treatment of hyperphosphatemia)

RN 107-15-3 HCAPLUS

CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$\text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{NH}_2$

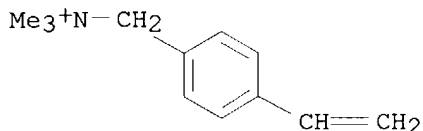
RN 37339-48-3 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

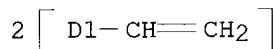


● Cl<sup>-</sup>

CM 2

CRN 1321-74-0

CMF C10 H10  
CCI IDS



L47 ANSWER 22 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:67094 HCAPLUS

DOCUMENT NUMBER: 126:96956

TITLE: Back printing-type recording material for ink-jet printing

INVENTOR(S): Sekine, Mikya; Uto, Tetsuya

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

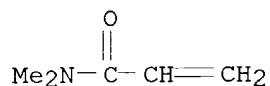
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 08282092	A2	19961029	JP 1995-94737	19950420
PRIORITY APPLN. INFO.:				JP 1995-94737	19950420
AB	In the back print-type recording material with a porous ink-absorbing layer formed on a transparent support, the ink-absorbing layer contains at least a polymer contg. a quaternary ammonium base and pigment particles with the refractive index of $\geq 1.7$ to prevent image smears and increase water fastness. One type of the polymers may be represented by I (R1 = H, Me; Q = O, NH; R2-4 = Me, Et, benzyl; X = halogen ion, sulfonic acid ion, etc.; n = 2, 3).				
IC	ICM B41M005-00 ICS D21H019-38; D21H019-44				
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38				
IT	471-34-1, Calcium carbonate, uses 7631-86-9, Silica, uses 9003-08-1, Epostar S6 13463-67-7, Tipaque A-100, uses 26160-89-4, Epostar S 30973-80-9, Acrylamide-N,N-dimethylacrylamide copolymer 185457-15-2 185457-17-4 185457-19-6 185457-21-0 185457-23-2 RL: NUU (Other use, unclassified); USES (Uses) (back printing-type recording material for ink-jet printing)				
IT	30973-80-9, Acrylamide-N,N-dimethylacrylamide copolymer 185457-15-2 185457-17-4 185457-21-0 185457-23-2 RL: NUU (Other use, unclassified); USES (Uses) (back printing-type recording material for ink-jet printing)				

RN 30973-80-9 HCAPLUS  
 CN 2-Propenamide, N,N-dimethyl-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

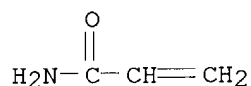
CMF C5 H9 N O



CM 2

CRN 79-06-1

CMF C3 H5 N O

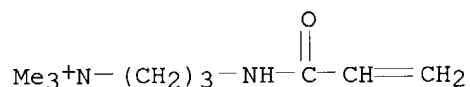


RN 185457-15-2 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

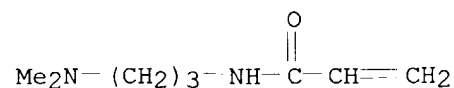


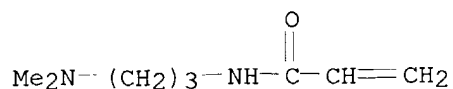
● Cl<sup>-</sup>

CM 2

CRN 3845-76-9

CMF C8 H16 N2 O

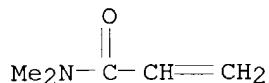




CM 3

CRN 2680-03-7

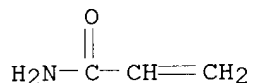
CMF C5 H9 N O



CM 4

CRN 79-06-1

CMF C3 H5 N O



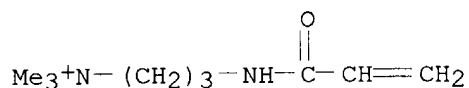
RN 185457-17-4 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride,  
polymer with N-[3-(dimethylamino)propyl]-2-propenamide,  
N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and  
2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

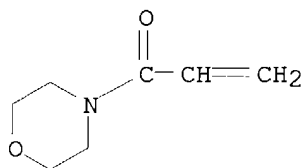
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 5117-12-4

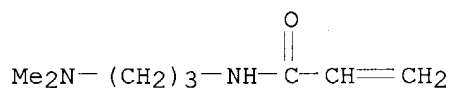
CMF C7 H11 N O2



CM 3

CRN 3845-76-9

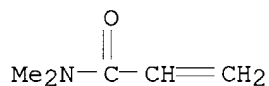
CMF C8 H16 N2 O



CM 4

CRN 2680-03-7

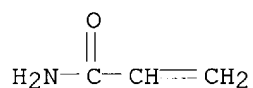
CMF C5 H9 N O



CM 5

CRN 79-06-1

CMF C3 H5 N O



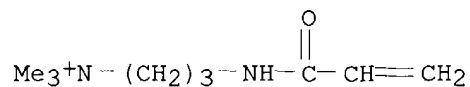
RN 185457-21-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide,  
2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-  
propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

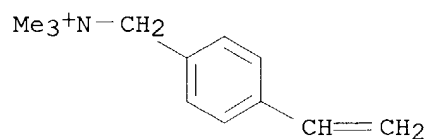
CMF C9 H19 N2 O . Cl



CM 2

CRN 7538-38-7

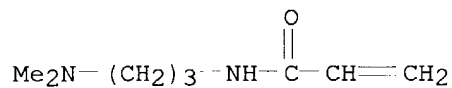
CMF C12 H18 N . Cl



CM 3

CRN 3845-76-9

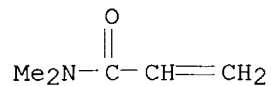
CMF C8 H16 N2 O



CM 4

CRN 2680-03-7

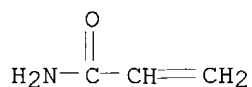
CMF C5 H9 N O



CM 5

CRN 79-06-1

CMF C3 H5 N O

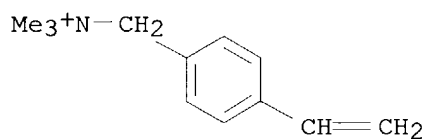


RN 185457-23-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
 N-[3-(dimethylamino)propyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

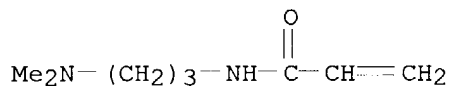


● Cl<sup>-</sup>

CM 2

CRN 3845-76-9

CMF C8 H16 N2 O



L47 ANSWER 23 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1997:44690 HCAPLUS  
 DOCUMENT NUMBER: 126:67572  
 TITLE: Direct imaging-type lithographic printing original  
 plate and its manufacture  
 INVENTOR(S): Kato, Eiichi; Tashiro, Hiroshi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08276679	A2	19961022	JP 1995-81229	19950406

PRIORITY APPLN. INFO.: JP 1995-81229 19950406

AB The plate comprises a water-resistant support coated with an image-receiving layer (contact angle  $\leq 65^\circ$  for H<sub>2</sub>O) contg. (A) Zn oxide, at least a part of which is obtained by wet dispersion, (B) a water-sol. compd. having  $\geq 1$  acidic group selected from CO<sub>2</sub>H, SO<sub>3</sub>H, and PO<sub>3</sub>H<sub>2</sub> groups forming a chelate compd. with Zn oxide or Zn ion, (C) a water-sol. basic compd., and (D) a binder resin. The plate is manufd. by applying a compn. contg. A, B, C, D, and a dispersant on a water-resistant support. The plate showed good smudge resistance.

IC ICM B41N001-14  
ICS G03G005-06

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **Polyamides, uses**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(with epichlorohydrin, chelating agent; zinc oxide-contg. direct imaging-type lithog. printing original plate with good smudge resistance)

IT **184970-57-8**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(chelating agent; cross-linked, zinc oxide-contg. direct imaging-type lithog. printing original plate with good smudge resistance)

IT **184970-57-8**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(chelating agent; cross-linked, zinc oxide-contg. direct imaging-type lithog. printing original plate with good smudge resistance)

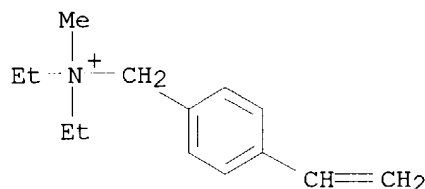
RN 184970-57-8 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-diethyl-N-methyl-, bromide, polymer with 2-methyl-2-propenoic acid and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 83305-60-6

CMF C14 H22 N . Br

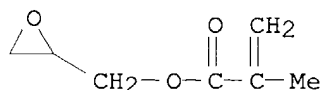
● Br<sup>-</sup>

CM 2

CRN 106-91-2



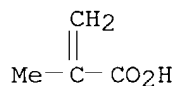
CMF C7 H10 O3



CM 3

CRN 79-41-4

CMF C4 H6 O2



L47 ANSWER 24 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:607517 HCAPLUS  
 DOCUMENT NUMBER: 125:269849  
 TITLE: **Chemiluminescent** energy transfer assays  
 INVENTOR(S): Bronstein, Irena; Edwards, Brooks; Voyta, John  
 PATENT ASSIGNEE(S): Tropix, Inc., USA  
 SOURCE: PCT Int. Appl., 62 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9625667	A1	19960822	WO 1995-US1506	19950213
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2212738	AA	19960822	CA 1995-2212738	19950213
AU 9519118	A1	19960904	AU 1995-19118	19950213
AU 704940	B2	19990506		
EP 809804	A1	19971203	EP 1995-911618	19950213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
JP 11500222	T2	19990106	JP 1995-524903	19950213
AU 9943447	A1	19991028	AU 1999-43447	19990806
PRIORITY APPLN. INFO.:			AU 1995-19118	19950213
			WO 1995-US1506	19950213
OTHER SOURCE(S):			MARPAT 125:269849	
AB A <b>chemiluminescent</b> assay is provided for the detn. of the presence or amt. of a biomol. or biopolymer, e.g., nucleic acid, protein,				

hapten, etc. in bound assays by using 1,2-**dioxetanes** in connection with AttoPhos as **chemiluminescent** substrate for enzyme-labeled targets or probes. Further disclosed is a kit for conducting a bioassay for the presence or concn. of a biopolymer comprising (1) an enzyme complex; (2) a 1,2-**dioxetane**; and (3) AttoPhos. The methods and kits can be used for detections done on membranes such as Western, Southern, Northern blotting, and DNA sequencing as well as for soln.-phase assays. The invention was used to det. prostate-specific antigen, biotinylated DNA, and IgG.

- IC ICM G01N033-543
- ICS C12Q001-68
- CC 9-5 (Biochemical Methods)
- Section cross-reference(s): 3, 15
- ST biopolymer detn **chemiluminescent** energy transfer assay;  
**dioxetane chemiluminescent** energy transfer assay;  
 AttoPhos **chemiluminescent** energy transfer assay; Ig detection  
**chemiluminescent** energy transfer assay; blotting  
**chemiluminescent** energy transfer assay; hybridization  
**chemiluminescent** energy transfer assay
- IT Deoxyribonucleic acid sequence determination
- Electron acceptors
- Electron donors
- Energy transfer
- Immunoassay
- Nucleic acid hybridization  
 (biopolymer detn. by **chemiluminescent** energy transfer assay)
- IT Biopolymers
- Deoxyribonucleic acids
- Haptens
- Proteins, analysis
- Ribonucleic acids
- RL: ANT (Analyte); ANST (Analytical study)  
 (biopolymer detn. by **chemiluminescent** energy transfer assay)
- IT Enzymes
- RL: ANT (Analyte); ARG (Analytical reagent use); ANST (Analytical study);  
 USES (Uses)  
 (biopolymer detn. by **chemiluminescent** energy transfer assay)
- IT Polyamide fibers, analysis
- RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST  
 (Analytical study); USES (Uses)  
 (biopolymer detn. by **chemiluminescent** energy transfer assay)
- IT Deoxyribonucleic acids
- RL: ANT (Analyte); ANST (Analytical study)  
 (biotinylated; biopolymer detn. by **chemiluminescent** energy  
 transfer assay)
- IT Antibodies
- RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (enzyme conjugates; biopolymer detn. by **chemiluminescent**  
 energy transfer assay)
- IT Immunoglobulins
- RL: ANT (Analyte); ANST (Analytical study)  
 (G, biopolymer detn. by **chemiluminescent** energy transfer  
 assay)
- IT Antigens
- RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL  
 (Biological study); USES (Uses)  
 (PSA (prostate-specific antigen), biopolymer detn. by

**chemiluminescent** energy transfer assay)

IT Cameras  
(charge-coupled, biopolymer detn. by **chemiluminescent** energy transfer assay)

IT Spectrochemical analysis  
(**chemiluminescence**, biopolymer detn. by **chemiluminescent** energy transfer assay)

IT Immunoassay  
(immunoblotting, biopolymer detn. by **chemiluminescent** energy transfer assay)

IT **6788-84-7D**, 1,2-Dioxetane, derivs. 9001-78-9  
9013-20-1D, Streptavidin, alk. phosphatase conjugates 9017-80-5,  
Poly(vinylbenzyltrimethylammonium chloride) 72852-29-0,  
Poly(vinylbenzyltributylammonium chloride) 122341-56-4 124951-96-8  
129058-45-3, AttoPhos 142456-88-0 142849-53-4 146985-47-9  
151346-38-2 161697-30-9 **181871-50-1**  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(biopolymer detn. by **chemiluminescent** energy transfer assay)

IT 9004-70-0, Nitrocellulose 24937-79-9, PVDF  
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST  
(Analytical study); USES (Uses)  
(biopolymer detn. by **chemiluminescent** energy transfer assay)

IT **6788-84-7D**, 1,2-Dioxetane, derivs. **181871-50-1**  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(biopolymer detn. by **chemiluminescent** energy transfer assay)

RN 6788-84-7 HCAPLUS  
CN 1,2-Dioxetane (6CI, 8CI, 9CI) (CA INDEX NAME)

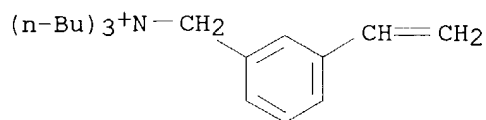


RN 181871-50-1 HCAPLUS  
CN Benzenemethanaminium, N,N,N-tributyl-3-ethenyl-, chloride, polymer with  
[[3(or 4)-ethenylphenyl]methyl]triphenylphosphonium chloride (9CI) (CA  
INDEX NAME)

CM 1

CRN 170621-10-0

CMF C21 H36 N . Cl



● Cl<sup>-</sup>

CM 2

CRN 146925-49-7  
 CMF C27 H24 P . Cl  
 CCI IDS



D1-CH=CH<sub>2</sub>

Ph<sub>3</sub><sup>+</sup>P-CH<sub>2</sub>-D1

● Cl<sup>-</sup>

L47 ANSWER 25 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:571140 HCAPLUS

DOCUMENT NUMBER: 125:223744

TITLE: Effect of pressure and ionic strength of polyelectrolyte solutions on transport characteristics of ultrafiltration membranes

AUTHOR(S): Bildyukevich, A. V.; Logunova, A. V.; Sokolova, V. I.

CORPORATE SOURCE: Inst. Fiz.-Org. Khim., Belarus

SOURCE: Vestsi Akademii Navuk Belarusi, Seryya Khimichnykh Navuk (1996), (1), 57-60

CODEN: VAKNEK; ISSN: 0002-3590

PUBLISHER: Navuka i Tekhnika

DOCUMENT TYPE: Journal

LANGUAGE: Belorussian

AB Microfiltration of aq. solns. of poly(vinylpyrrolidone), poly(acrylic acid), poly(4-vinyl-N-benzyltrimethylammonium chloride), and poly(methyldiallylammonium chloride) was studied using membranes based on an acrylonitrile copolymer and on an arom. polyamide (Mifil). The polymers are chosen as potential recyclable complexing agents for heavy metals purifn. processes.

CC 38-3 (Plastics Fabrication and Uses)

IT **Polyamides, uses**

RL: DEV (Device component use); USES (Uses)

(arom., ultrafiltration membrane; effect of pressure and ionic strength of polyelectrolyte solns. on transport characteristics of ultrafiltration membranes)

IT 9003-01-4, Poly(acrylic acid) 9003-39-8, Poly(vinylpyrrolidone)

**26780-21-2**, Poly(4-vinyl-N-benzyltrimethylammonium chloride)

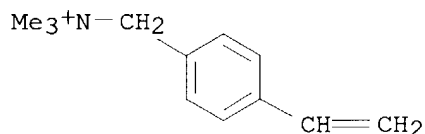
29566-78-7, Poly(methyldiallylammonium chloride)

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(effect of pressure and ionic strength of polyelectrolyte solns. on transport characteristics of ultrafiltration membranes)

IT **26780-21-2**, Poly(4-vinyl-N-benzyltrimethylammonium chloride)

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (effect of pressure and ionic strength of polyelectrolyte solns. on  
 transport characteristics of ultrafiltration membranes)  
 RN 26780-21-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer  
 (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 7538-38-7  
 CMF C12 H18 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 26 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:563431 HCAPLUS

DOCUMENT NUMBER: 125:187567

TITLE: **Chemiluminescent** detecting method and apparatus

INVENTOR(S): Tsuchiya, Tohru; Akimoto, Taizo; Mori, Keiji; Kojima, Yasushi; Dietzel, Guenter; Petz, Gerhard; Koepke, Andreas

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

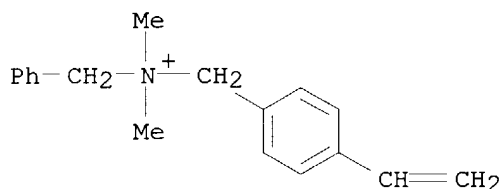
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 725278	A1	19960807	EP 1996-101209	19960129
EP 725278	B1	20001206		
R: DE, FR, GB, SE				
JP 08210983	A2	19960820	JP 1995-15153	19950201
JP 08247949	A2	19960927	JP 1995-51465	19950310
JP 08261941	A2	19961011	JP 1995-59198	19950317
→US 5672514	A	19970930	US 1996-588854	19960119
PRIORITY APPLN. INFO.:			JP 1995-15153	A 19950201
			JP 1995-51465	A 19950310
			JP 1995-59198	A 19950317

AB A **chemiluminescent** detecting method includes the steps of uniformly irradiating with radiation a stimuable phosphor sheet formed with a stimuable phosphor layer contg. a stimuable phosphor which can store an energy of radiation and be stimulated by visible light to emit

the energy of radiation in a form of light, thereby storing energy of radiation uniformly therein, selectively labeling a biopolymer with a labeling substance which can produce **chemiluminescent** light by contact of itself and a **chemiluminescent** substance, causing the biopolymer labeled with the labeling substance and the **chemiluminescent** substance to come into contact with each other, and exposing the stimuable phosphor sheet to **chemiluminescent** light produced by the contact of the biopolymer labeled with the labeling substance and the **chemiluminescent** substance. According to this **chemiluminescent** detecting method, it is possible to effectively produce information relating to a biopolymer such as information relating to a gene with high accuracy by using a stimuable phosphor sheet which can be easily handled and used for both the **chemiluminescent** detecting method and the autoradiog. detecting method. In a preferred aspect of this invention, the **chemiluminescent** substance contains a sensitizing agent that can change the wavelength of light emitted from the **chemiluminescent** substance. In another preferred aspect, the stimuable phosphor is a barium fluorohalide phosphor and the sensitizing agent contains poly[vinylbenzyl(benzylidimethylammonium chloride)] as a main component.

- IC ICM G01N033-58  
 CC 3-1 (Biochemical Genetics)  
 Section cross-reference(s): 9, 73  
 ST biopolymer **chemiluminescent** detection app phosphor sheet; gene detection **chemiluminescence** app; autoradiog phosphor sheet analysis **chemiluminescence**; nucleic acid hybridization **chemiluminescence** app  
 IT Cations  
 Deoxyribonucleic acid sequence determination  
 Electron beam  
 Gamma ray  
 Nucleic acid hybridization  
 Phosphors  
 Polymer-supported reagents  
 Ribonucleic acid sequence determination  
 Surfactants  
 X-ray  
 (**chemiluminescent** detecting method and app. for biopolymers)  
 IT Biopolymers  
 Gene  
 Nucleic acids  
 Proteins, properties  
 RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)  
 (**chemiluminescent** detecting method and app. for biopolymers)  
 IT Polyamide fibers, analysis  
 RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)  
 (**chemiluminescent** detecting method and app. for biopolymers)  
 IT Radiography  
 (auto-, **chemiluminescent** detecting method and app. for biopolymers)  
 IT Optical detectors  
 Spectrochemical analysis  
 (**chemiluminescence**, **chemiluminescent** detecting method and app. for biopolymers)  
 IT Dyes  
 (fluorescent, **chemiluminescent** detecting method and app. for

biopolymers)  
 IT 21669-04-5, Barium bromide fluoride (BaBrF) 124951-96-8, AMPPD  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (chemiluminescent detecting method and app. for biopolymers)  
 IT 127-09-3, Sodium acetate 518-47-8 7647-14-5, Sodium chloride, analysis  
 9004-82-4 12174-49-1, RUBY 12415-33-7, EMERALD 60311-02-6  
**114783-41-4**  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (chemiluminescent detecting method and app. for biopolymers)  
 IT 12587-46-1, .alpha.-Particle 12587-47-2, .beta.-Ray  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (chemiluminescent detecting method and app. for biopolymers)  
 IT **114783-41-4**  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (chemiluminescent detecting method and app. for biopolymers)  
 RN 114783-41-4 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride,  
 homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 66099-76-1  
 CMF C18 H22 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 27 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:472936 HCAPLUS  
 DOCUMENT NUMBER: 125:181354  
 TITLE: Ink-jet recording receptor  
 INVENTOR(S): Ikeda, Mitsuhiro; Kato, Makoto  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08142496	A2	19960604	JP 1994-287035	19941122
PRIORITY APPLN. INFO.:			JP 1994-287035	19941122
AB The receptor has an ink absorbing layer prepd. by mixing a polymer (A)				

contg. quaternary ammonium salt I (R1-3 = alkyl, aryl, aralkyl; X- = halo ion, sulfate, alkylsulfonate, alkylcarbonate) as a monomer unit and another polymer (B) contg. II and/or III (R4 = H, Me; Q = O, NH; R5-7 = Me, Et; R8-10 = Me, Et, alkyl; X- = same as above; n = 2, 3) as monomer unit(s), then 3-dimensionally crosslinking the polymers by an hardening agent. The receptor shows good water resistance.

IC ICM B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **180330-13-6 180330-14-7 180330-15-8**  
**180330-16-9 180330-17-0 180330-18-1**  
**180330-19-2 180330-20-5 180330-21-6**  
**180330-22-7 180330-23-8 180330-24-9**  
**180330-25-0 180330-26-1 180330-27-2**  
**180330-28-3 180330-29-4 180330-30-7**

RL: DEV (Device component use); USES (Uses)

(ink jet recording receptor contg. crosslinked quaternary ammonium salt polymer)

IT **180330-13-6 180330-14-7 180330-15-8**  
**180330-16-9 180330-17-0 180330-18-1**  
**180330-19-2 180330-20-5 180330-21-6**  
**180330-22-7 180330-23-8 180330-24-9**  
**180330-25-0 180330-26-1 180330-27-2**  
**180330-28-3 180330-29-4 180330-30-7**

RL: DEV (Device component use); USES (Uses)

(ink jet recording receptor contg. crosslinked quaternary ammonium salt polymer)

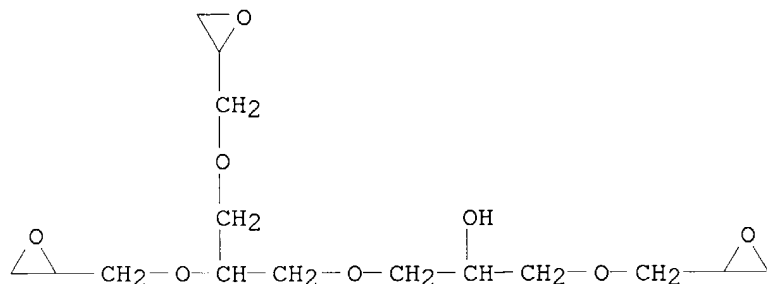
RN 180330-13-6 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

CMF C15 H26 O8

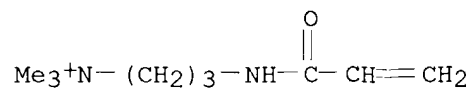


CM 2

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

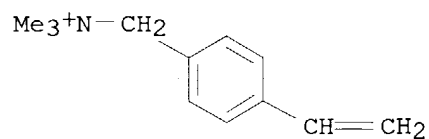




CM 3

CRN 7538-38-7

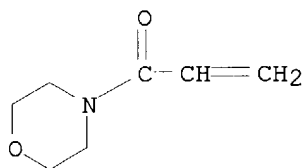
CMF C12 H18 N . Cl



CM 4

CRN 5117-12-4

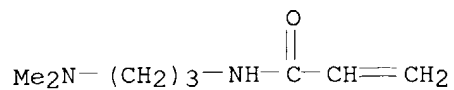
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

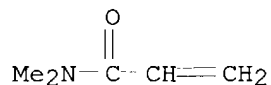
CMF C8 H16 N2 O



CM 6

CRN 2680-03-7

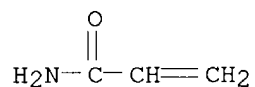
CMF C5 H9 N O



CM 7

CRN 79-06-1

CMF C3 H5 N O



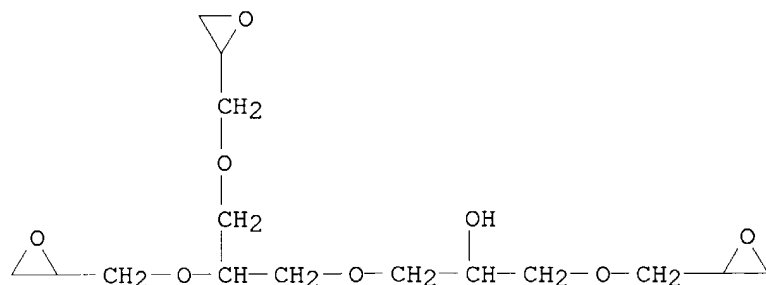
RN 180330-14-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

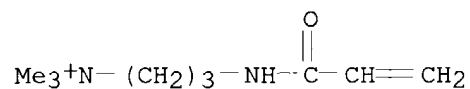
CMF C15 H26 O8



CM 2

CRN 45021-77-0

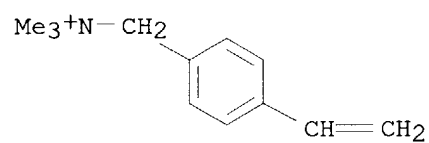
CMF C9 H19 N2 O . Cl



CM 3

CRN 7538-38-7

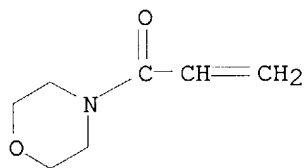
CMF C12 H18 N . Cl



CM 4

CRN 5117-12-4

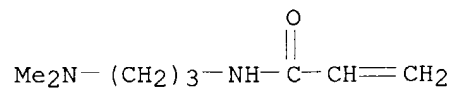
CMF C7 H11 N O2



CM 5

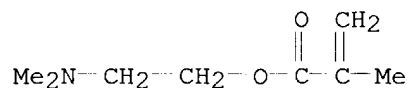
CRN 3845-76-9

CMF C8 H16 N2 O



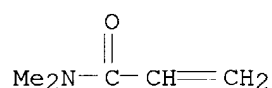
CM 6

CRN 2867-47-2  
CMF C8 H15 N O2



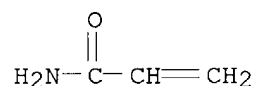
CM 7

CRN 2680-03-7  
CMF C5 H9 N O



CM 8

CRN 79-06-1  
CMF C3 H5 N O

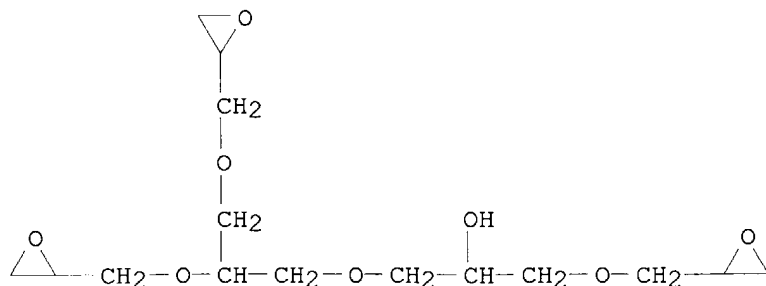


RN 180330-15-8 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-triethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

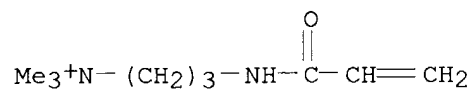
CRN 74696-50-7  
CMF C15 H26 O8



CM 2

CRN 45021-77-0

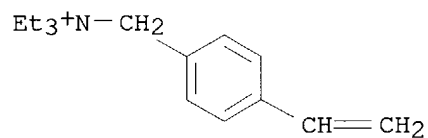
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 14350-43-7

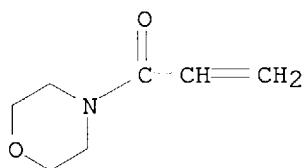
CMF C15 H24 N . Cl

● Cl<sup>-</sup>

CM 4

CRN 5117-12-4

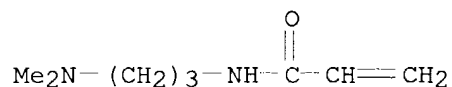
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

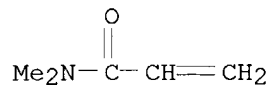
CMF C8 H16 N2 O



CM 6

CRN 2680-03-7

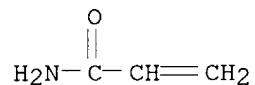
CMF C5 H9 N O



CM 7

CRN 79-06-1

CMF C3 H5 N O



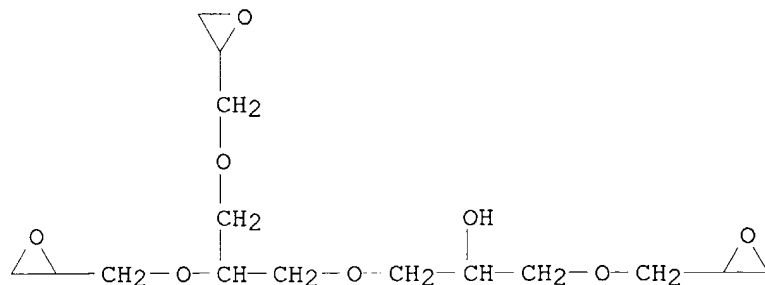
RN 180330-16-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI)  
(CA INDEX NAME)

CM 1

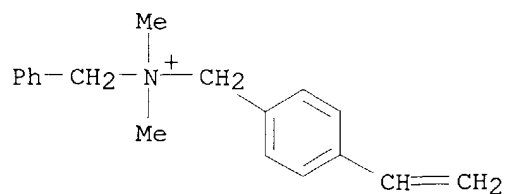
CRN 74696-50-7

CMF C15 H26 O8



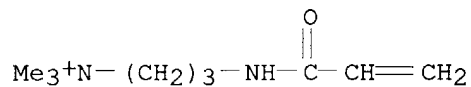
CM 2

CRN 66099-76-1  
 CMF C18 H22 N . Cl



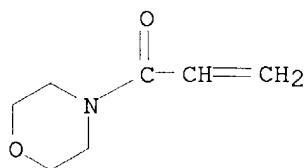
● Cl<sup>-</sup>

CM 3  
 CRN 45021-77-0  
 CMF C9 H19 N2 O . Cl

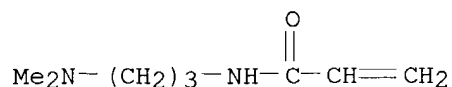


● Cl<sup>-</sup>

CM 4  
 CRN 5117-12-4  
 CMF C7 H11 N O2



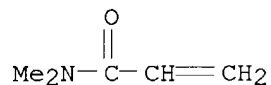
CM 5  
 CRN 3845-76-9  
 CMF C8 H16 N2 O



CM 6

CRN 2680-03-7

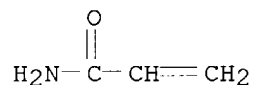
CMF C5 H9 N O



CM 7

CRN 79-06-1

CMF C3 H5 N O



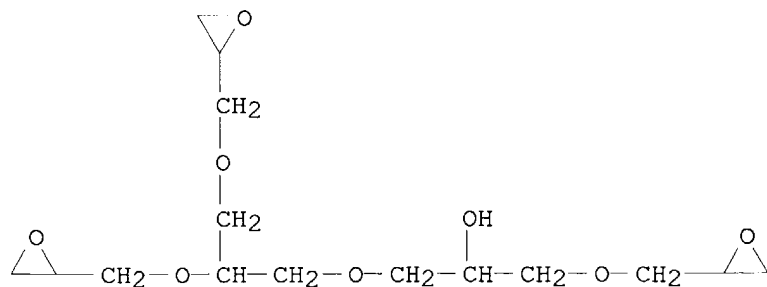
RN 180330-17-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI)  
(CA INDEX NAME)

CM 1

CRN 74696-50-7

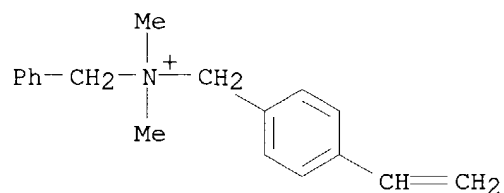
CMF C15 H26 O8



CM 2



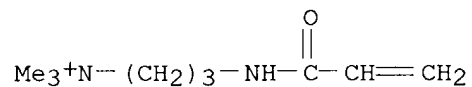
CRN 66099-76-1  
CMF C18 H22 N . Cl



● Cl<sup>-</sup>

CM 3

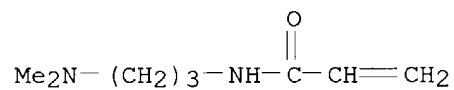
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

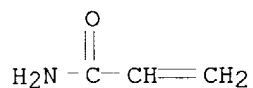
CM 4

CRN 3845-76-9  
CMF C8 H16 N2 O



CM 5

CRN 79-06-1  
CMF C3 H5 N O



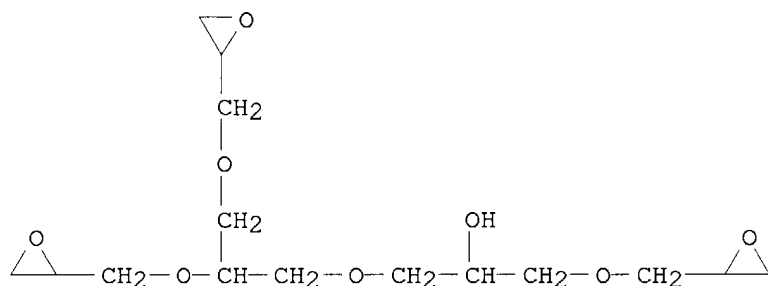
RN 180330-18-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

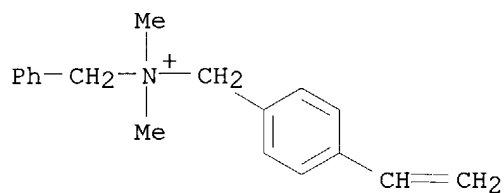
CMF C15 H26 O8



CM 2

CRN 66099-76-1

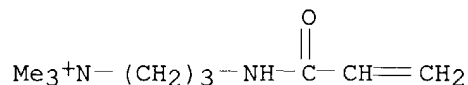
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

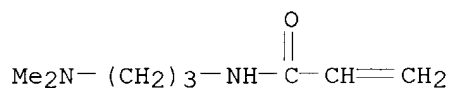
CRN 45021-77-0

CMF C9 H19 N2 O . Cl



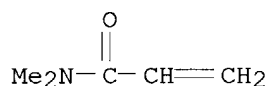
CM 4

CRN 3845-76-9  
CMF C8 H16 N2 O



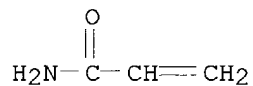
CM 5

CRN 2680-03-7  
CMF C5 H9 N O



CM 6

CRN 79-06-1  
CMF C3 H5 N O

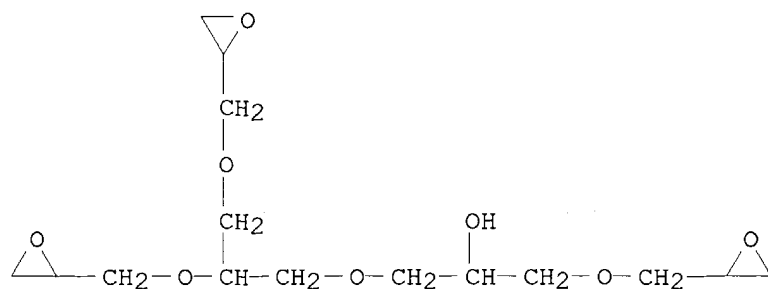


RN 180330-19-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

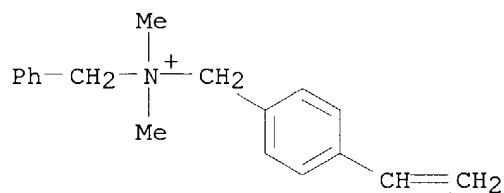
CRN 74696-50-7  
CMF C15 H26 O8



CM 2

CRN 66099-76-1

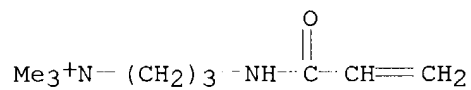
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

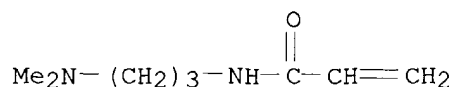
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 3845-76-9

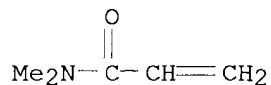
CMF C8 H16 N2 O



CM 5

CRN 2680-03-7

CMF C5 H9 N O



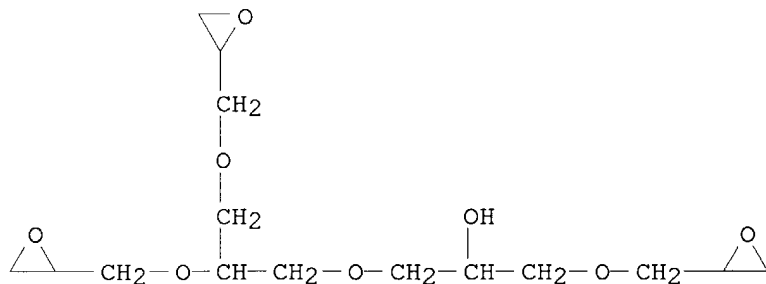
RN 180330-20-5 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

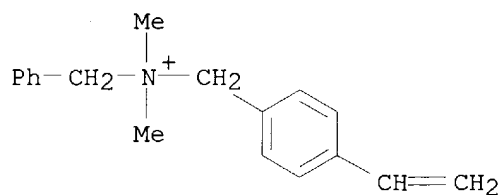
CMF C15 H26 O8



CM 2

CRN 66099-76-1

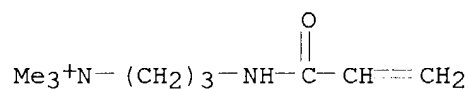
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

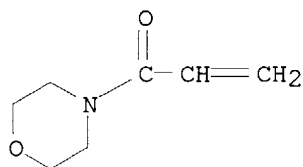
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 5117-12-4

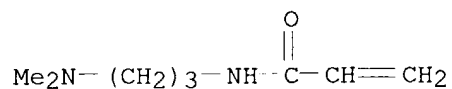
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

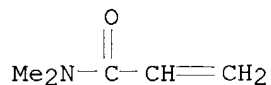
CMF C8 H16 N2 O



CM 6

CRN 2680-03-7

CMF C5 H9 N O



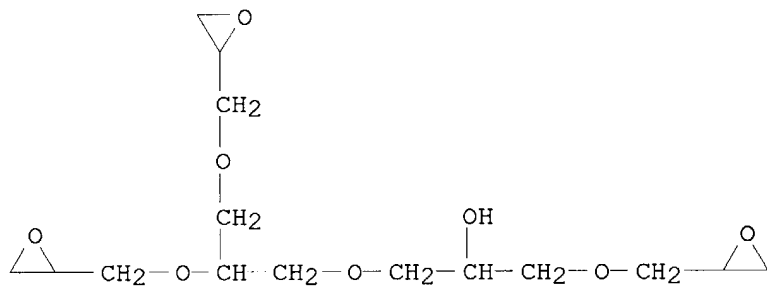
RN 180330-21-6 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

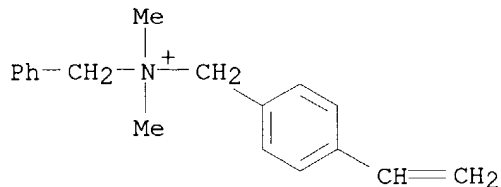
CMF C15 H26 O8



CM 2

CRN 66099-76-1

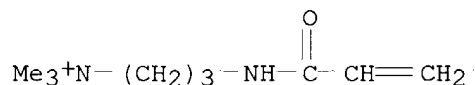
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

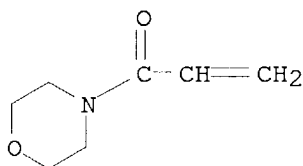
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 5117-12-4

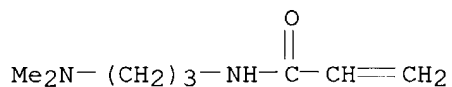
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

CMF C8 H16 N2 O



RN 180330-22-7 HCAPLUS

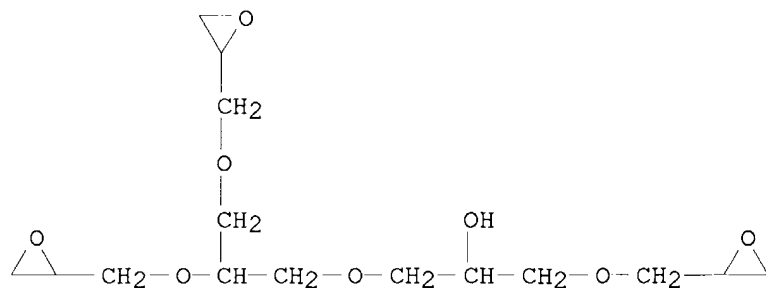
CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

CMF C15 H26 O8

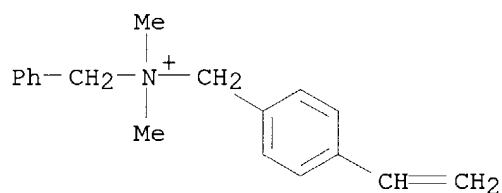




CM 2

CRN 66099-76-1

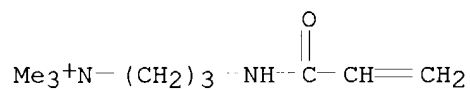
CMF C18 H22 N . Cl

●  $\text{Cl}^-$ 

CM 3

CRN 45021-77-0

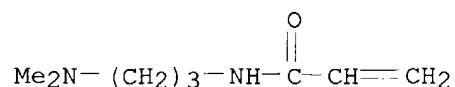
CMF C9 H19 N2 O . Cl

●  $\text{Cl}^-$ 

CM 4

CRN 3845-76-9

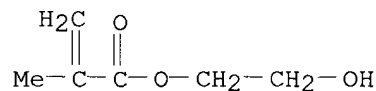
CMF C8 H16 N2 O



CM 5

CRN 868-77-9

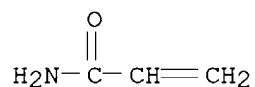
CMF C6 H10 O3



CM 6

CRN 79-06-1

CMF C3 H5 N O



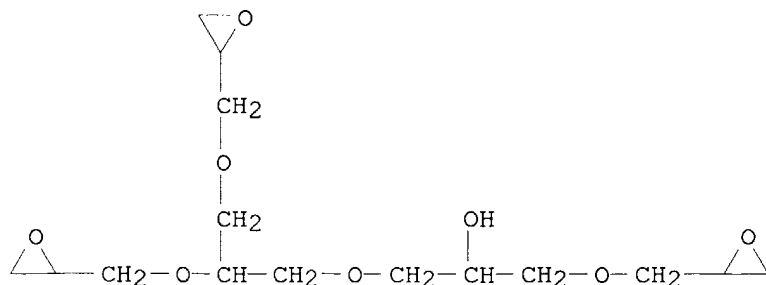
RN 180330-23-8 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

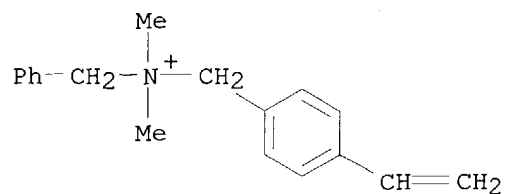
CRN 74696-50-7

CMF C15 H26 O8



CM 2

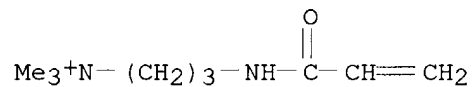
CRN 66099-76-1  
CMF C18 H22 N . Cl



● Cl<sup>-</sup>

CM 3

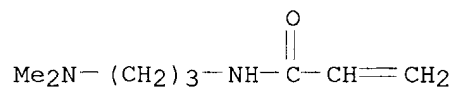
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

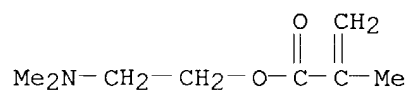
CM 4

CRN 3845-76-9  
CMF C8 H16 N2 O



CM 5

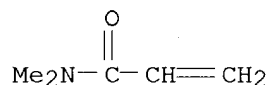
CRN 2867-47-2  
CMF C8 H15 N O2



CM 6

CRN 2680-03-7

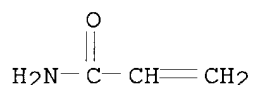
CMF C5 H9 N O



CM 7

CRN 79-06-1

CMF C3 H5 N O



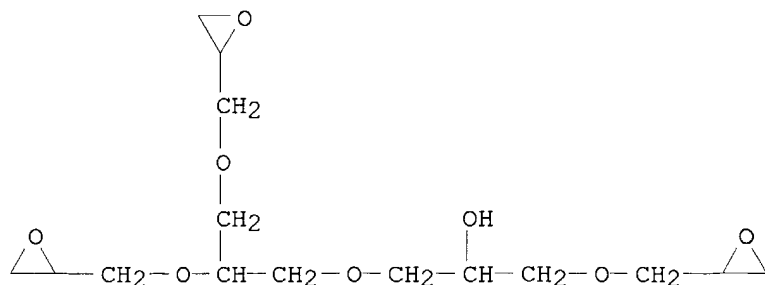
RN 180330-24-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

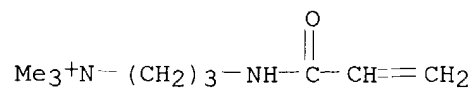
CMF C15 H26 O8



CM 2

CRN 45021-77-0

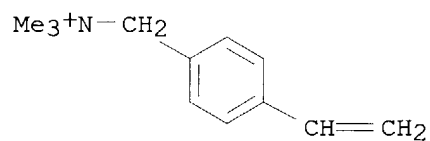
CMF C9 H19 N2 O . Cl



CM 3

CRN 7538-38-7

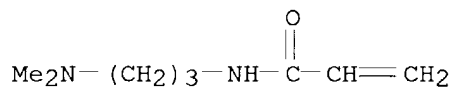
CMF C12 H18 N . Cl



CM 4

CRN 3845-76-9

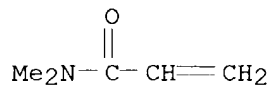
CMF C8 H16 N2 O



CM 5

CRN 2680-03-7

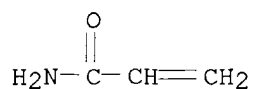
CMF C5 H9 N O



CM 6

CRN 79-06-1

CMF C3 H5 N O



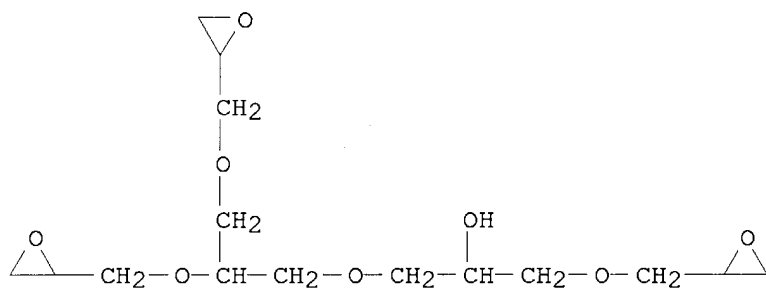
RN 180330-25-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol,  
 N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide,  
 4-(1-oxo-2-propenyl)morpholine and N,N,N-trimethyl-3-[(1-oxo-2-  
 propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

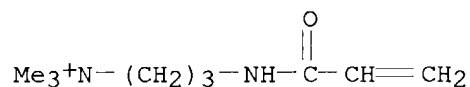
CMF C15 H26 O8



CM 2

CRN 45021-77-0

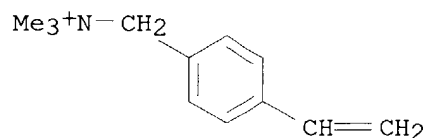
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 7538-38-7

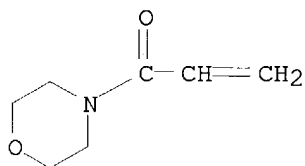
CMF C12 H18 N . Cl



CM 4

CRN 5117-12-4

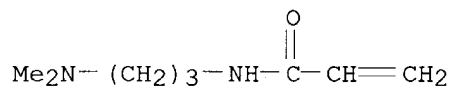
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

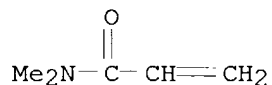
CMF C8 H16 N2 O



CM 6

CRN 2680-03-7

CMF C5 H9 N O



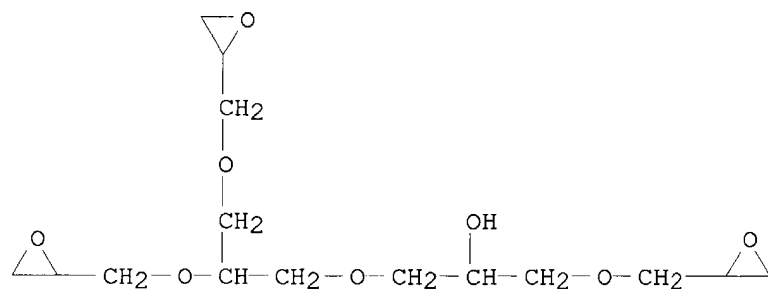
RN 180330-26-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 2-propenamide and N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

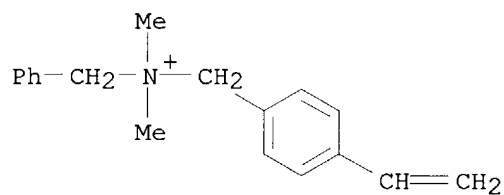
CMF C15 H26 O8



CM 2

CRN 66099-76-1

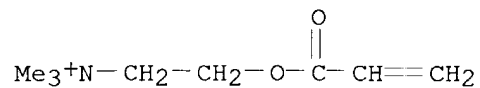
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 44992-01-0

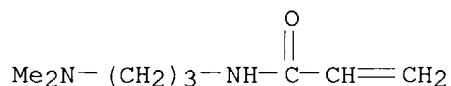
CMF C8 H16 N O2 . Cl

● Cl<sup>-</sup>

CM 4

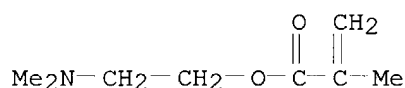


CRN 3845-76-9  
CMF C8 H16 N2 O



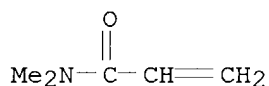
CM 5

CRN 2867-47-2  
CMF C8 H15 N O2



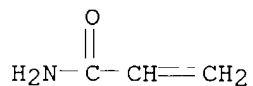
CM 6

CRN 2680-03-7  
CMF C5 H9 N O



CM 7

CRN 79-06-1  
CMF C3 H5 N O

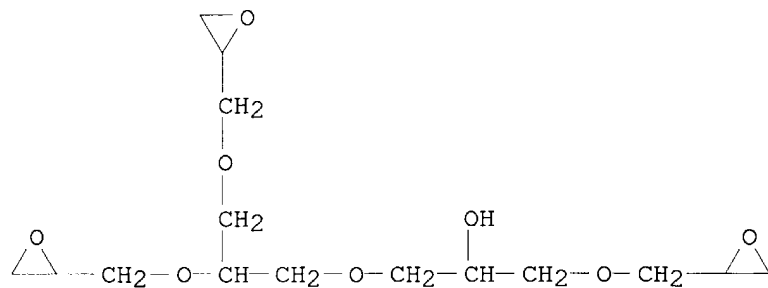


RN 180330-27-2 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

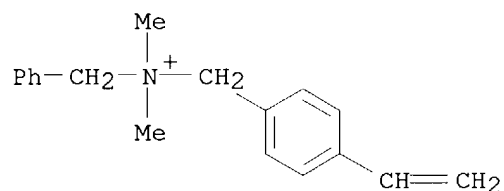
CMF C15 H26 O8



CM 2

CRN 66099-76-1

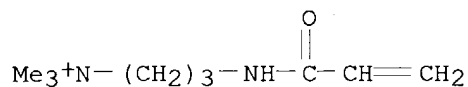
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

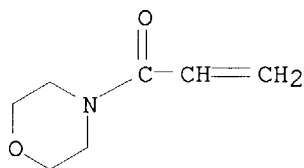
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 5117-12-4

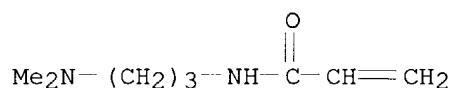
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

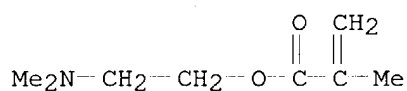
CMF C8 H16 N2 O



CM 6

CRN 2867-47-2

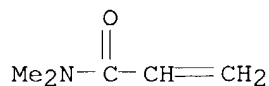
CMF C8 H15 N O2



CM 7

CRN 2680-03-7

CMF C5 H9 N O



RN 180330-28-3 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N-[3-(dimethylamino)propyl]-2-propenamide, 4-(1-oxo-2-propenyl)morpholine and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

CMF C15 H26 O8

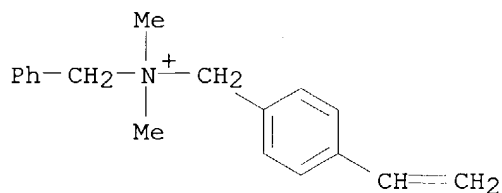




CM 2

CRN 66099-76-1

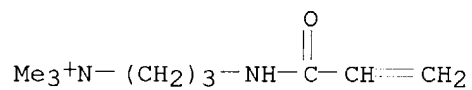
CMF C18 H22 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 45021-77-0

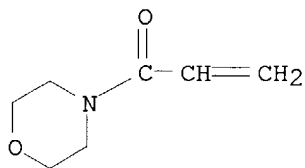
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 4

CRN 5117-12-4

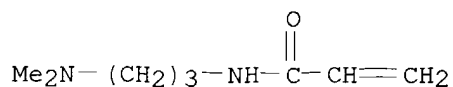
CMF C7 H11 N O2



CM 5

CRN 3845-76-9

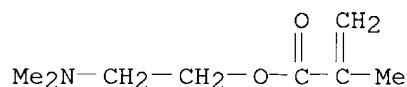
CMF C8 H16 N2 O



CM 6

CRN 2867-47-2

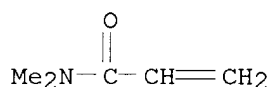
CMF C8 H15 N O2



CM 7

CRN 2680-03-7

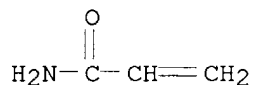
CMF C5 H9 N O



CM 8

CRN 79-06-1

CMF C3 H5 N O



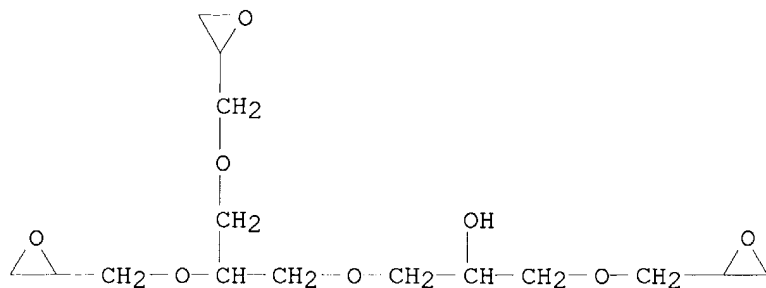
RN 180330-30-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, 2-propenamide and N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

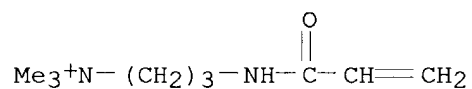
CMF C15 H26 O8



CM 2

CRN 45021-77-0

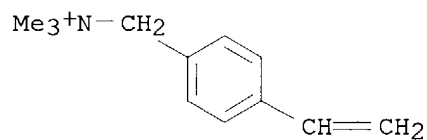
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 7538-38-7

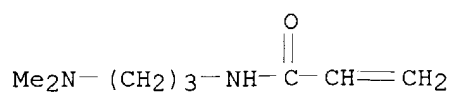
CMF C12 H18 N . Cl

● Cl<sup>-</sup>

CM 4

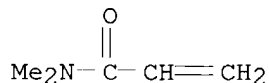
CRN 3845-76-9

CMF C8 H16 N2 O

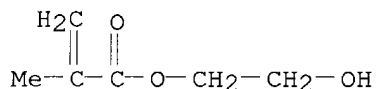




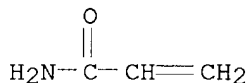
CM 5

CRN 2680-03-7  
CMF C5 H9 N O

CM 6

CRN 868-77-9  
CMF C6 H10 O3

CM 7

CRN 79-06-1  
CMF C3 H5 N O

L47 ANSWER 28 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:304013 HCAPLUS

DOCUMENT NUMBER: 124:337329

TITLE: **Chemiluminescent** reagent and assay using a substituted acetanilide for light generation

INVENTOR(S): Kissel, Thomas R.; Fingar, Sarah A.; Friedman, Alan E.

PATENT ASSIGNEE(S): Johnson and Johnson clinical Diagnostics, Inc., USA

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 704539	A2	19960403	EP 1995-306012	19950829
EP 704539	A3	19960410		
EP 704539	B1	20010228		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

US 5705357	A	19980106	US 1994-297475	19940829
JP 08173191	A2	19960709	JP 1995-217831	19950825
CA 2157062	AA	19960301	CA 1995-2157062	19950828
FI 9504029	A	19960301	FI 1995-4029	19950828
NO 9503368	A	19960301	NO 1995-3368	19950828
AU 9530301	A1	19960314	AU 1995-30301	19950828
AU 700528	B2	19990107		
AT 199399	E	20010315	AT 1995-306012	19950829

PRIORITY APPLN. INFO.:

US 1994-297475 A 19940829

OTHER SOURCE(S):

MARPAT 124:337329

AB A simplified compn. for generating a **chemiluminescent** signal in the presence of a peroxidase includes a substituted acetanilide, e.g., 3'-chloro-4'-hydroxyacetanilide or 3'-bromo-4'-hydroxyacetanilide, as the sole light-producing substrate for the peroxidase. Assays for various analytes can be carried out with this compn. at near neutral pH, exhibit low background, and are highly sensitive. The prepn. is described of anal. elements contg. the reagents of this invention, and examples are given of the immunoassay of TSH as well as detn. of peroxidase in a fungus using the described reagents.

IC ICM C12Q001-28  
ICS G01N033-535

ICA G01N033-58; C12Q001-68

CC 9-5 (Biochemical Methods)  
Section cross-reference(s): 7, 15, 80

ST **chemiluminescent** reagent substituted acetanilide peroxidase detection; app **chemiluminescent** reagent biochem analysis; immunoassay **chemiluminescence** peroxidase detection reagent

IT Arthromyces ramosus  
Buffer substances and systems  
Fungi  
Oxidizing agents  
Polymer-supported reagents  
(**chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT Gelatins, analysis  
RL: ARU (Analytical role, unclassified); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)  
(**chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT Polyelectrolytes  
Surfactants  
(cationic, **chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT Luminescent substances  
(chemi-, **chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT Immunoassay  
Spectrochemical analysis  
(**chemiluminescence**, **chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT 9002-71-5, TSH  
RL: ANT (Analyte); ANST (Analytical study)  
(**chemiluminescent** reagent and assay using substituted acetanilide for light generation)

IT 9003-99-0, Peroxidase  
RL: ANT (Analyte); ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 7722-84-1, Hydrogen peroxide, analysis  
RL: ANT (Analyte); ARU (Analytical role, unclassified); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 2045-39-8, 3'-Fluoro-4'-hydroxyacetanilide 103015-83-4 105326-71-4 176661-64-6  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 103-84-4DP, Acetanilide, substituted 3964-54-3P, 3'-Chloro-4'-hydroxyacetanilide 6329-78-8P, 3'-Bromo-4'-hydroxyacetanilide 79694-26-1P, 3',5'-Dichloro-4'-hydroxyacetanilide  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 25038-59-9, Polyethylene terephthalate, analysis  
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 57-09-0, Cetyltrimethylammonium bromide 67-43-6, Diethylenetriaminepentaacetic acid 77-86-1 112-02-7, Cetyltrimethylammonium chloride 123-03-5, Cetylpyridinium chloride 9002-93-1, Triton x-100 9069-59-4, Methacrylic acid-vinyltoluene copolymer 57534-41-5, Zonyl FSN 74921-88-3 176661-58-8 176661-60-2 176661-63-5  
RL: ARU (Analytical role, unclassified); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 103-90-2, 4'-Hydroxyacetanilide 42486-53-3, 4-Amino-2,6-dichlorophenol hydrochloride  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

IT 176661-60-2 176661-63-5  
RL: ARU (Analytical role, unclassified); MOA (Modifier or additive use); ANST (Analytical study); USES (Uses)  
(chemiluminescent reagent and assay using substituted acetanilide for light generation)

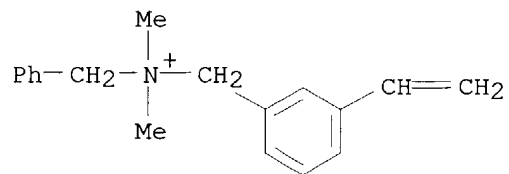
RN 176661-60-2 HCAPLUS

CN Benzenemethanaminium, 3-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride, polymer with diethenylbenzene, ethenylbenzene and 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)benzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 176661-59-9

CMF C18 H22 N . C1

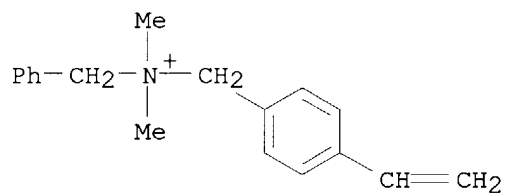


● Cl<sup>-</sup>

CM 2

CRN 66099-76-1

CMF C18 H22 N . Cl



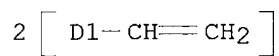
● Cl<sup>-</sup>

CM 3

CRN 1321-74-0

CMF C10 H10

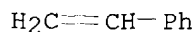
CCI IDS



CM 4

CRN 100-42-5

CMF C8 H8



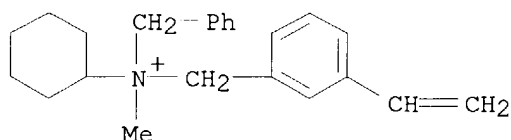
RN 176661-63-5 HCAPLUS

CN Benzenemethanaminium, N-cyclohexyl-3-ethenyl-N-methyl-N-(phenylmethyl)-, chloride, polymer with N-cyclohexyl-4-ethenyl-N-methyl-N-(phenylmethyl)benzenemethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 176661-62-4

CMF C23 H30 N . Cl

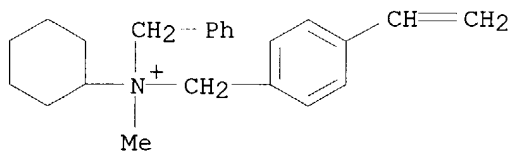


● Cl<sup>-</sup>

CM 2

CRN 176661-61-3

CMF C23 H30 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 29 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:200426 HCAPLUS

DOCUMENT NUMBER: 124:279186

TITLE: Phosphate-binding polymers for oral administration

INVENTOR(S): Holmes Farley, Stephen R.; Mandeville, Iii W. Harry; Whitesides, George M.

PATENT ASSIGNEE(S): Geltex Pharmaceuticals, Inc., USA

SOURCE: U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 105,591, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5496545	A	19960305	US 1994-238458	19940505
CA 2169356	AA	19950223	CA 1994-2169356	19940810
CA 2310960	AA	19950223	CA 1994-2310960	19940810
CA 2310960	C	20030527		
CA 2402590	AA	19950223	CA 1994-2402590	19940810
WO 9505184	A2	19950223	WO 1994-US9060	19940810
WO 9505184	A3	19950323		
W: AU, CA, JP, KR, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9475607	A1	19950314	AU 1994-75607	19940810
AU 689797	B2	19980409		
EP 716606	A1	19960619	EP 1994-925819	19940810
EP 716606	B1	20010829		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
NZ 271826	A	20000623	NZ 1994-271826	19940810
JP 3113283	B2	20001127	JP 1995-507065	19940810
JP 09504782	T2	19970513		
JP 2001055336	A2	20010227	JP 2000-201107	19940810
AT 204756	E	20010915	AT 1994-925819	19940810
EP 1133989	A2	20010919	EP 2001-200604	19940810
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
ES 2161780	T3	20011216	ES 1994-925819	19940810
PT 716606	T	20020228	PT 1994-94925819	19940810
US 5667775	A	19970916	US 1995-471747	19950606
CN 1187131	A	19980708	CN 1996-194612	19960603
US 6083495	A	20000704	US 1997-929784	19970915
HK 1009243	A1	20011228	HK 1998-109833	19980811
US 6509013	B1	20030121	US 2000-542329	20000404
US 2003133902	A1	20030717	US 2002-322904	20021217
PRIORITY APPLN. INFO.:			US 1993-105591	B2 19930811
			US 1994-238458	A 19940505
			CA 1994-2169356	A3 19940810
			CA 1994-2310960	A3 19940810
			EP 1994-925819	A3 19940810
			JP 1995-507065	A3 19940810
			WO 1994-US9060	W 19940810
			US 1995-471747	A3 19950606
			US 1997-929784	A1 19970915
			US 2000-542329	A1 20000404
AB	Phosphate-binding polymers are provided for removing phosphate from the gastrointestinal tract. The polymers are orally administered, and are useful for the treatment of hyperphosphatemia. For example, allylamine-epichlorohydrin copolymer was tested by stirring it in a phosphate contg. soln. at pH 7 for 3 h; after 3 h the polymer was filtered off and the residual phosphate concn. in the test soln. was detd. The phosphate bound to the polymer was 3.1 meq/g of the polymer.			
IC	ICM A61K031-785			
NCL	424078110			
CC	1-9 (Pharmacology)			
	Section cross-reference(s): 35			
IT	79-17-4DP, Aminoguanidine, reaction products with poly(methacryloyl			

- chloride) **107-15-3DP**, Ethylenediamine, reaction products with Me methacrylate-divinylbenzene copolymer 111-40-ODP, Diethylenetriamine, reaction products with Me methacrylate-divinylbenzene copolymer 814-68-6DP, Acryloyl chloride, reaction products with Polyethyleneimine 2482-00-ODP, Agmatine sulfate, reaction products with poly(methacryloyl chloride) 25085-17-OP, Diethylenetriamine-epichlorohydrin copolymer 26336-38-9P, Poly(vinylamine) 26913-06-4DP, Poly[imino(1,2-ethanediy)], reaction products with acryloyl chloride 26913-06-4P, Poly[imino(1,2-ethanediy)] 34369-44-3P 52757-95-6P, Allylamine-epichlorohydrin copolymer 57491-00-6P, Poly(allyltrimethylammonium chloride) 68039-13-4P, Poly(methacrylamidopropyltrimethylammonium chloride) 124012-04-OP 162786-25-6P 162786-36-9DP, Divinylbenzene-methacryloyl chloride copolymer, reaction products with agmatine  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (phosphate-binding polymers for treatment of hyperphosphatemia)
- IT 50-81-7D, Ascorbic acid, reaction products with polyethyleneimine-epichlorohydrin 77-92-9D, Citric acid, reaction products with polyethyleneimine-epichlorohydrin 87-69-4D, Tartaric acid, reaction products with polyethyleneimine-epichlorohydrin 104-78-9D, reaction products with Me methacrylate-divinylbenzene copolymer 110-15-6D, Succinic acid, reaction products with polyethyleneimine-epichlorohydrin 112-24-3D, Triethylenetetramine, reaction products with Me methacrylate-divinylbenzene copolymer 112-57-2D, Tetraethylenepentamine, reaction products with Me methacrylate-divinylbenzene copolymer 4067-16-7D, Pentaethylenhexamine, reaction products with Me methacrylate-divinylbenzene copolymer 7664-93-9D, Sulfuric acid, reaction products with polyethyleneimine-epichlorohydrin 26338-45-4D, methylated 27754-92-3 **37339-48-3**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (phosphate-binding polymers for treatment of hyperphosphatemia)
- IT **107-15-3DP**, Ethylenediamine, reaction products with Me methacrylate-divinylbenzene copolymer  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (phosphate-binding polymers for treatment of hyperphosphatemia)
- RN 107-15-3 HCAPLUS  
 CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

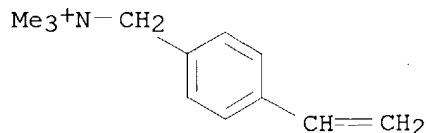
H<sub>2</sub>N-CH<sub>2</sub>-CH<sub>2</sub>-NH<sub>2</sub>

- IT **37339-48-3**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (phosphate-binding polymers for treatment of hyperphosphatemia)
- RN 37339-48-3 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with diethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

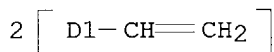
● Cl<sup>-</sup>

CM 2

CRN 1321-74-0

CMF C10 H10

CCI IDS



L47 ANSWER 30 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:178482 HCAPLUS

DOCUMENT NUMBER: 124:233511

TITLE: Molecular characterization of synthetic cationic polyelectrolytes

AUTHOR(S): Wandrey, Christine; Goernitz, Eckhard

CORPORATE SOURCE: Max-Planck-Inst. Kolloid- Grenzflaechenforsch.,  
Teltow, D-14513, Germany

SOURCE: Polymer News (1995), 20(12), 377-84

CODEN: PLYNBU; ISSN: 0032-3918

PUBLISHER: Gordon &amp; Breach

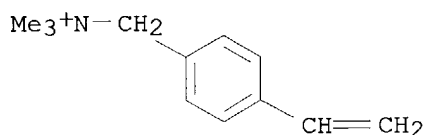
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review, with 51 refs., is given on methods for mol. characterization of synthetic cationic polyelectrolytes. Data of detn. of mol. wt. and mol. wt. distribution of important or new cationic ammonium homo- and co-polymers [polyacrylamides] are summarized and special problems resulting from polyelectrolyte effects are discussed. The Mark-Kuhn-Houwink-Sakurada relationship and the mol. wt. distribution results are influenced by electrochem. parameters and the chem. structure of a polyelectrolyte.



CC 36-0 (Physical Properties of Synthetic High Polymers)  
 IT **Polyamides, properties**  
 RL: PRP (Properties)  
 (acrylic, quaternary ammonium contg.; mol. characterization of synthetic cationic polyelectrolytes)  
 IT 26062-79-3, Poly(diallyldimethylammonium chloride) 26161-33-1,  
 Poly(methacryloyloxyethyltrimethylammonium chloride) **26780-21-2**,  
 Poly[(p-vinylbenzyl)trimethylammonium chloride] 54076-97-0,  
 Poly[2-(acryloxy)ethyltrimethylammonium chloride] 71550-12-4,  
 Poly(allylammonium chloride)  
 RL: PRP (Properties)  
 (mol. characterization of synthetic cationic polyelectrolytes)  
 IT **26780-21-2**, Poly[(p-vinylbenzyl)trimethylammonium chloride]  
 RL: PRP (Properties)  
 (mol. characterization of synthetic cationic polyelectrolytes)  
 RN 26780-21-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer  
 (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 7538-38-7  
 CMF C12 H18 N . Cl



●  $\text{Cl}^-$

L47 ANSWER 31 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1996:10209 HCAPLUS  
 DOCUMENT NUMBER: 124:57322  
 TITLE: Hydrophobic and electrostatic interactions in water-soluble associating copolymers  
 AUTHOR(S): Selb, Joseph; Biggs, Simon; Renoux, Delphine; Candau, Françoise  
 CORPORATE SOURCE: Inst. Charles Sadron, Cent. Recherches Macromol.-Ecole d; Appl. Hauts Polymeres, Strasbourg, 67083, Fr.  
 SOURCE: Advances in Chemistry Series (1996), 248 (Hydrophilic Polymers), 251-78  
 CODEN: ADCSAJ; ISSN: 0065-2393  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Associative polyacrylamide derivs. contg. both ionic sites and small nos. of hydrophobic groups were prep'd., and their thickening properties in aq. soln. were studied. Two radical micellar copolymn. processes in aq. media were used: the comonomer of acrylamide was either a hydrophobic monomer (N-ethylphenyl acrylamide) solubilized within surfactant micelles (sodium

dodecyl sulfate) or a micelle-forming cationically polymerizable surfactant (n-hexadecyldimethyl-4-vinylbenzylammonium chloride). Relationships between the copolymn. mechanism and the copolymer microstructure are proposed. Owing to the competition between attractive hydrophobic interactions and repulsive electrostatic interactions, such hydrophobically modified polyacrylamides exhibit different rheol. behavior in aq. soln., depending on shear rate, shear time, ionic strength, and copolymer characteristics.

CC 36-5 (Physical Properties of Synthetic High Polymers)

Section cross-reference(s): 66

IT **Polyamides, properties**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(acrylic, hydrophobic and electrostatic interactions in water-sol. assocg. acrylamide copolymers)

IT 112218-43-6, Acrylamide-N-4-ethylphenyl acrylamide copolymer

**172333-86-7**

RL: PRP (Properties)  
(hydrophobic and electrostatic interactions in water-sol. assocg. acrylamide copolymers)

IT **172333-86-7**

RL: PRP (Properties)  
(hydrophobic and electrostatic interactions in water-sol. assocg. acrylamide copolymers)

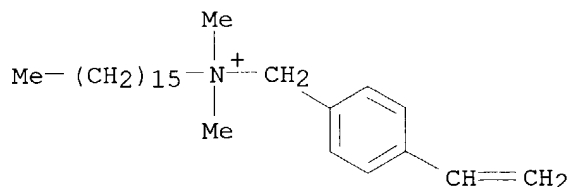
RN 172333-86-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N-hexadecyl-N,N-dimethyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 87810-16-0

CMF C27 H48 N . Cl

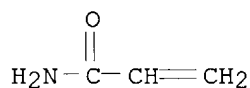


● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



L47 ANSWER 32 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:982873 HCAPLUS

DOCUMENT NUMBER: 124:160424

TITLE: Ink-jet recording material with improved transparency and gloss

INVENTOR(S): Ikeda, Mitsuhiro; Furukawa, Akira; Kato, Makoto

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

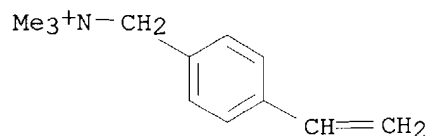
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07257016	A2	19951009	JP 1994-48355	19940318
PRIORITY APPLN. INFO.:			JP 1994-48355	19940318
AB The material consists of a support coated with an ink-absorbing layer contg. a water-sol. quaternary ammonium salt-contg. polymer and a layer contg. org. polymer fine particles (ink-absorbing layer coverage ratio 1-50 wt.% ) and 1-100 wt.% of an alc.- or water-sol. polymer (<0.3 g/m <sup>2</sup> ). The quaternary ammonium salt-contg. polymer may obtained by polymn. of CH <sub>2</sub> :C(R <sub>1</sub> )[C(:O)Q(CH <sub>2</sub> ) <sub>n</sub> N+R <sub>2</sub> R <sub>3</sub> R <sub>4</sub> .X <sup>-</sup> , a styrene deriv. I, and CH <sub>2</sub> :CHCH <sub>2</sub> N+R <sub>8</sub> R <sub>9</sub> R <sub>10</sub> .X <sup>-</sup> (R <sub>1</sub> = H, Me; Q = O, NH; R <sub>2</sub> -7 = Me, Et; X <sup>-</sup> = halo, SO <sub>3</sub> <sup>-</sup> , alkylsulfonic acid anion, AcO <sup>-</sup> , alkylcarboxylic acid anion; n = 2, 3; R <sub>8</sub> -10 = Me, Et, allyl). The material showed good transparency and water resistance.				
IC	ICM B41M005-00			
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)			
	Section cross-reference(s): 38			
IT	26590-05-6P, Acrylamide-diallyldimethylammonium chloride copolymer			
	73363-10-7P	75150-29-7P	172785-52-3P	172785-53-4P
	173255-41-9P 173255-42-0P 173255-43-1P			
	173255-44-2P			
	RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)			
	(ink-jet recording materials having quaternary ammonium salt-contg. polymer ink-absorbing layer with good gloss and transparency)			
IT	73363-10-7P 173255-41-9P 173255-42-0P			
	173255-43-1P 173255-44-2P			
	RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)			
	(ink-jet recording materials having quaternary ammonium salt-contg. polymer ink-absorbing layer with good gloss and transparency)			
RN	73363-10-7 HCAPLUS			
CN	Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)			
CM	1			
CRN	7538-38-7			
CMF	C12 H18 N . Cl			

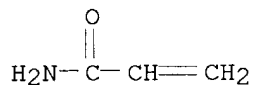


● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



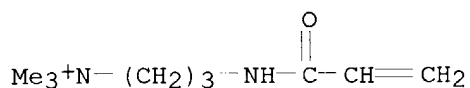
RN 173255-41-9 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

CMF C9 H19 N2 O . Cl

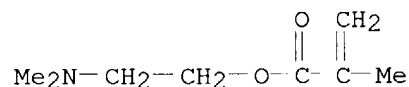


● Cl<sup>-</sup>

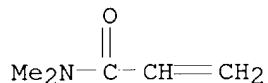
CM 2

CRN 2867-47-2

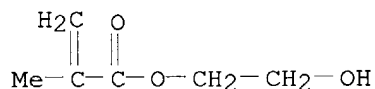
CMF C8 H15 N O2



CM 3

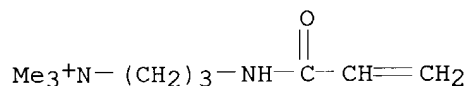
CRN 2680-03-7  
CMF C5 H9 N O

CM 4

CRN 868-77-9  
CMF C6 H10 O3

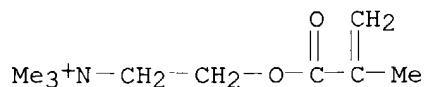
RN 173255-42-0 HCAPLUS  
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride,  
polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate,  
N,N-dimethyl-2-propenamide and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-  
propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0  
CMF C9 H19 N2 O . Cl● Cl<sup>-</sup>

CM 2

CRN 5039-78-1  
CMF C9 H18 N O2 . Cl

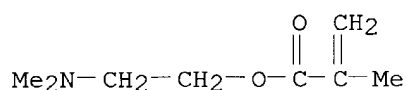


● Cl<sup>-</sup>

CM 3

CRN 2867-47-2

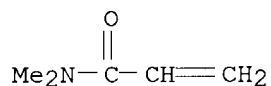
CMF C8 H15 N O2



CM 4

CRN 2680-03-7

CMF C5 H9 N O



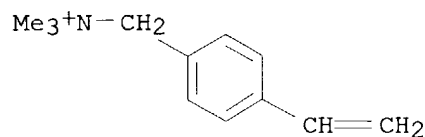
RN 173255-43-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

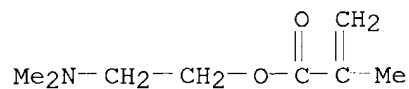
CMF C12 H18 N . Cl



● Cl<sup>-</sup>

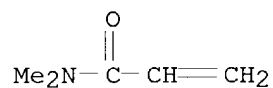
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



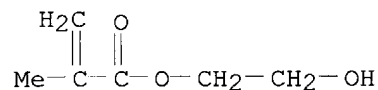
CM 3

CRN 2680-03-7  
CMF C5 H9 N O



CM 4

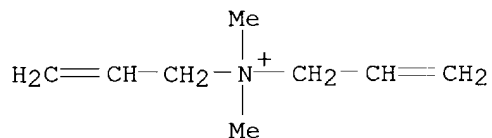
CRN 868-77-9  
CMF C6 H10 O3



RN 173255-44-2 HCAPLUS  
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide  
and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

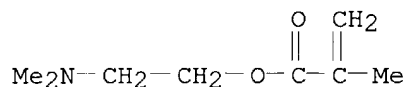
CRN 7398-69-8  
CMF C8 H16 N . Cl



● Cl<sup>-</sup>

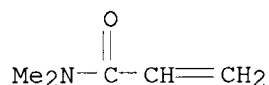
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



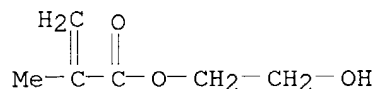
CM 3

CRN 2680-03-7  
CMF C5 H9 N O



CM 4

CRN 868-77-9  
CMF C6 H10 O3



L47 ANSWER 33 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:973924 HCAPLUS

DOCUMENT NUMBER: 124:131568

TITLE: Ink-jet recording receptor with good transparency and glossiness

INVENTOR(S): Furukawa, Akira; Kato, Makoto

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

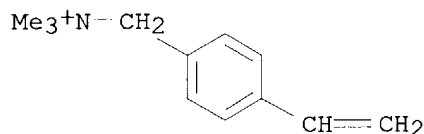
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242057	A2	19950919	JP 1994-33698	19940303
PRIORITY APPLN. INFO.:			JP 1994-33698	19940303
AB The receptor comprises on a support successively (1) an ink-absorbing layer contg. a water-sol. polymer with quaternary ammonium salt group and (2) a layer contg. silica fine particles and a water and alc.-sol. polymer				



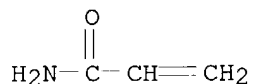
10-150% of silica with ink-layer coverage of the polymer .1toeq.0.38/m2 and the silica particles in the range of 5-50%. The receptor shows good ink absorption, high glossiness, transparency and water-resistance.

IC ICM B41M005-00  
ICS D21H019-38; D21H019-44  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
IT **73363-10-7** 75150-29-7 172785-52-3 173341-85-0  
**173341-86-1 173341-87-2 173341-88-3**  
**173341-89-4 173341-90-7**  
RL: DEV (Device component use); USES (Uses)  
(ink-jet recording receptor with ink-absorbing layer contg. polymer with quaternary ammonium group)  
IT **73363-10-7 173341-86-1 173341-87-2**  
**173341-88-3 173341-89-4 173341-90-7**  
RL: DEV (Device component use); USES (Uses)  
(ink-jet recording receptor with ink-absorbing layer contg. polymer with quaternary ammonium group)  
RN 73363-10-7 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 7538-38-7  
CMF C12 H18 N . Cl



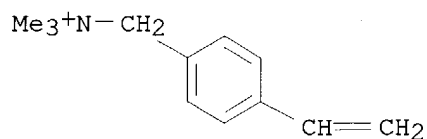
● Cl<sup>-</sup>

CM 2  
  
CRN 79-06-1  
CMF C3 H5 N O



RN 173341-86-1 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride and 2-propenamide (9CI) (CA INDEX NAME)  
  
CM 1

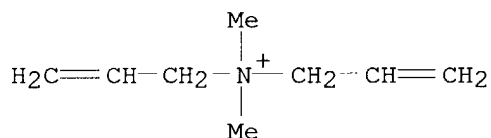
CRN 7538-38-7  
CMF C12 H18 N . Cl



● Cl<sup>-</sup>

CM 2

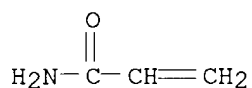
CRN 7398-69-8  
CMF C8 H16 N . Cl



● Cl<sup>-</sup>

CM 3

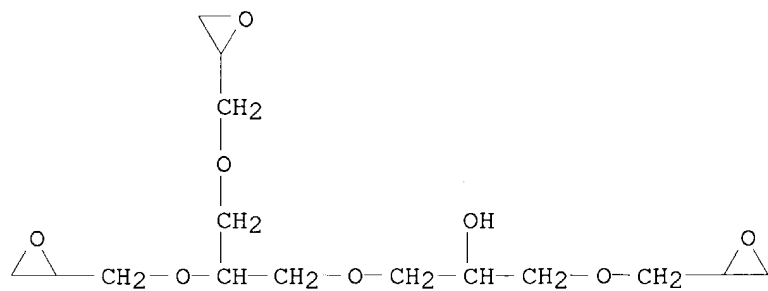
CRN 79-06-1  
CMF C3 H5 N O



RN 173341-87-2 HCAPLUS  
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[2-(dimethylamino)ethyl]-2-methyl-2-propenamide, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

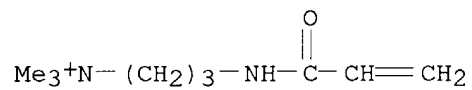
CRN 74696-50-7  
CMF C15 H26 O8



CM 2

CRN 45021-77-0

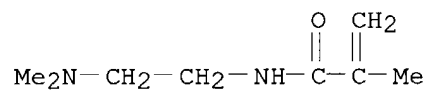
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 3

CRN 13081-44-2

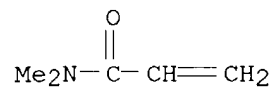
CMF C8 H16 N2 O



CM 4

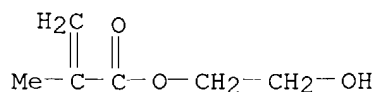
CRN 2680-03-7

CMF C5 H9 N O



CM 5

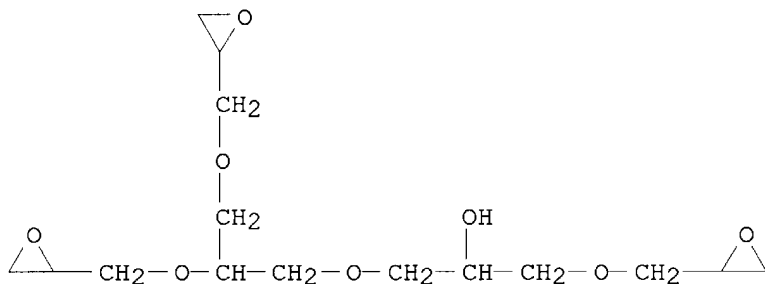
CRN 868-77-9  
CMF C6 H10 O3



RN 173341-88-3 HCAPLUS  
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, N-[2-(dimethylamino)ethyl]-2-propenamide, N,N-dimethyl-2-propenamide and N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]ethanaminium chloride (9CI) (CA INDEX NAME)

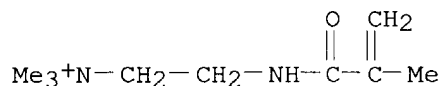
CM 1

CRN 74696-50-7  
CMF C15 H26 O8



CM 2

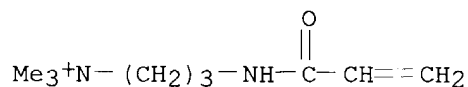
CRN 69174-85-2  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

CM 3

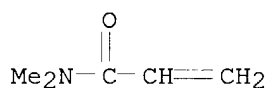
CRN 45021-77-0  
CMF C9 H19 N2 O . Cl



CM 4

CRN 2680-03-7

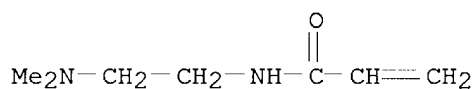
CMF C5 H9 N O



CM 5

CRN 925-76-8

CMF C7 H14 N2 O



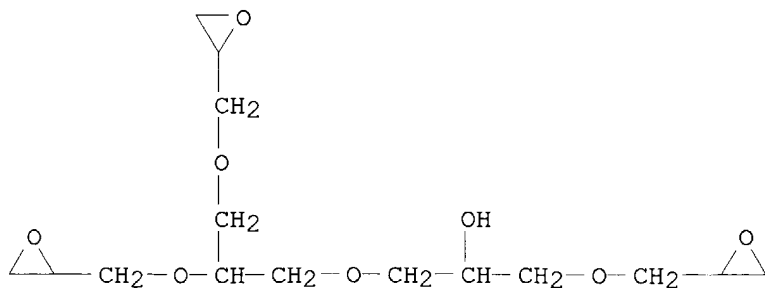
RN 173341-89-4 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

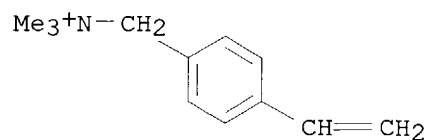
CMF C15 H26 O8



CM 2

CRN 7538-38-7

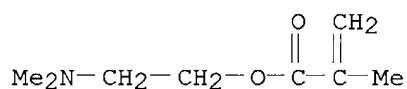
CMF C12 H18 N . Cl

● Cl<sup>-</sup>

CM 3

CRN 2867-47-2

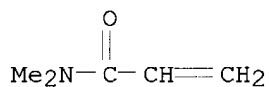
CMF C8 H15 N O2



CM 4

CRN 2680-03-7

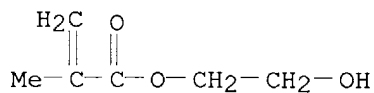
CMF C5 H9 N O



CM 5

CRN 868-77-9

CMF C6 H10 O3



RN 173341-90-7 HCAPLUS

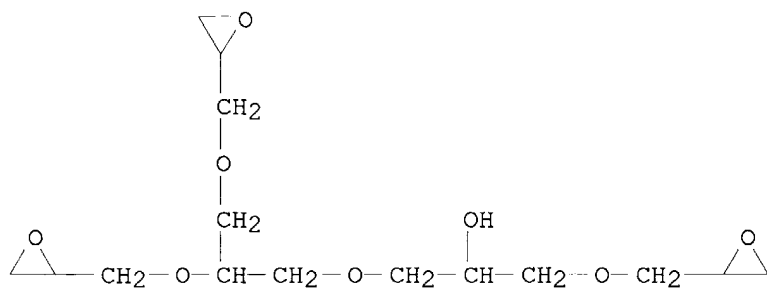
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with  
1-[2,3-bis(oxiranylmethoxy)propoxy]-3-(oxiranylmethoxy)-2-propanol,

N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate and  
 N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethanaminium chloride  
 (9CI) (CA INDEX NAME)

CM 1

CRN 74696-50-7

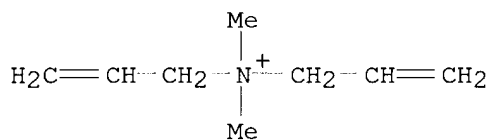
CMF C15 H26 O8



CM 2

CRN 7398-69-8

CMF C8 H16 N . Cl

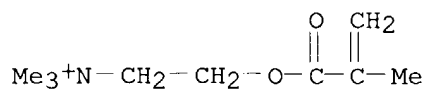


● Cl<sup>-</sup>

CM 3

CRN 5039-78-1

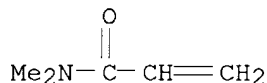
CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

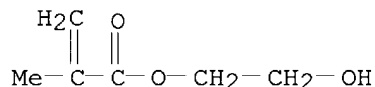
CM 4

CRN 2680-03-7  
CMF C5 H9 N O



CM 5

CRN 868-77-9  
CMF C6 H10 O3



L47 ANSWER 34 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:973923 HCAPLUS

DOCUMENT NUMBER: 124:131567

TITLE: Lustered ink-jet recording material with good transparency

INVENTOR(S): Suzuki, Katsumitsu; Furukawa, Akira; Kato, Makoto

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242056	A2	19950919	JP 1994-33697	19940303
PRIORITY APPLN. INFO.:			JP 1994-33697	19940303

AB The recording material comprises a support successively coated with an ink-absorbing layer contg. a quaternary ammonium base-contg. water-sol. polymer and an overcoat layer contg. SiO<sub>2</sub> fine particles with ink-absorbing layer coverage 5-50 wt.% and 10-150% (based on SiO<sub>2</sub>) of a water-sol. and alc.-insol. polymer with coating amt. 0.3 g/m<sup>2</sup>. The water-sol. polymer may be obtained from CH<sub>2</sub>:CR1COQ(CH<sub>2</sub>)<sub>n</sub>N+R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>.X-, styrene deriv. I, or CH<sub>2</sub>:CHCH<sub>2</sub>N+R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>.X- (R<sub>1</sub> = H, Me; R<sub>2</sub>-7 = Me, Et; R<sub>8</sub>-10 = Me, Et, allyl; Q = O, NH; X = halogen ion, sulfonic acid anion, alkylsulfonic acid anion, MeCO<sub>2</sub>-, alkylcarboxylic acid anion; n = 2, 3). The material showed good water resistance.

IC ICM B41M005-00

ICS D21H019-38; D21H019-44

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 42

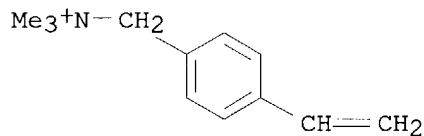


- IT 26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer  
**73363-10-7** 75150-29-7 172785-52-3 173027-26-4  
 RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (ink-absorbing layer; ink-jet printing sheet coated with silica-contg. water-sol. and alc.-insol. polymer overcoat layer with luster and good transparency)
- IT 79-39-0D, Methacrylamide, polymers 88-12-0, processes 818-61-1D, polymers 923-26-2D, 2-Hydroxypropyl methacrylate, polymers 924-42-5D, N-Methylolacrylamide, polymers 999-61-1D, polymers 2210-25-5D, polymers **2680-03-7D**, N,N-Dimethylacrylamide, polymers 2873-97-4D, Diacetone acrylamide, polymers 9002-89-5, Poly(vinyl alcohol) 9005-25-8, Starch, processes 9080-79-9, Poly(styrenesulfonic acid) sodium salt 25549-84-2, Poly(acrylic acid) sodium salt  
 RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (ink-jet printing sheet coated with silica-contg. water-sol. and alc.-insol. polymer overcoat layer with luster and good transparency)
- IT **73363-10-7**  
 RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (ink-absorbing layer; ink-jet printing sheet coated with silica-contg. water-sol. and alc.-insol. polymer overcoat layer with luster and good transparency)
- RN 73363-10-7 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

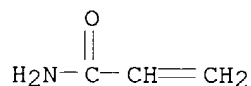
CMF C12 H18 N . Cl

● Cl<sup>-</sup>

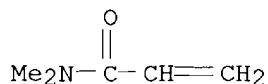
CM 2

CRN 79-06-1

CMF C3 H5 N O



IT **2680-03-7D**, N,N-Dimethylacrylamide, polymers  
 RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (ink-jet printing sheet coated with silica-contg. water-sol. and alc.-insol. polymer overcoat layer with luster and good transparency)  
 RN 2680-03-7 HCAPLUS  
 CN 2-Propenamide, N,N-dimethyl- (9CI) (CA INDEX NAME)



L47 ANSWER 35 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:973922 HCAPLUS

DOCUMENT NUMBER: 124:160422

TITLE: Lustered ink-jet recording material with good transparency

INVENTOR(S): Sekine, Mikya; Furukawa, Akira; Kato, Makoto

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242055	A2	19950919	JP 1994-33696	19940303
PRIORITY APPLN. INFO.:			JP 1994-33696	19940303

AB The recording material comprises a support successively coated with an ink-absorbing layer contg. a quaternary ammonium base-contg. water-sol. polymer and an overcoat layer comprised of SiO<sub>2</sub> fine particles covering 5-50% of the ink-absorbing layer and 10-150% (based on SiO<sub>2</sub>) of a water-insol. and alc.-sol. polymer with coating amt. 0.3 g/m<sup>2</sup>. The water-sol. polymer may be obtained from CH<sub>2</sub>:CR<sub>1</sub>COQ(CH<sub>2</sub>)<sub>n</sub>N+R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>.X-, a styrene deriv. I, or CH<sub>2</sub>:CHCH<sub>2</sub>N+R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>.X- (R<sub>1</sub> = H, Me; R<sub>2</sub>-7 = Me, Et; R<sub>8</sub>-10 = Me, Et, allyl; Q = O, NH; X = halogen ion, sulfonic acid anion, alkylsulfonic acid anion, MeCO<sub>2</sub>-, alkylcarboxylic acid anion; n = 2, 3). The material showed good water resistance.

IC ICM B41M005-00

ICS D21H019-38; D21H019-44

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 42

IT **Polyamides, processes**

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(ink-jet printing sheet coated with silica-contg. water-insol. and alc.-sol. polymer overcoat layer with luster and good transparency)

IT 26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer

**73363-10-7** 75150-29-7 172785-52-3 172785-53-4

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(ink-absorbing layer; ink-jet printing sheet coated with silica-contg. water-insol. and alc.-sol. polymer overcoat layer with luster and good transparency)

IT 79-39-0D, Methacrylamide, polymers 88-12-0D, polymers 818-61-1D, 2-Hydroxyethyl acrylate, polymers 923-26-2D, 2-Hydroxypropyl methacrylate, polymers 924-42-5D, N-Methylolacrylamide, polymers 999-61-1D, 2-Hydroxypropyl acrylate, polymers 2210-25-5D, N-Isopropylacrylamide, polymers **2680-03-7D**, N,N-Dimethylacrylamide, polymers 2873-97-4D, Diacetone acrylamide, polymers 9003-20-7, Poly(vinyl acetate) 9086-85-5, Poly(hydroxypropyl methacrylate) 25067-34-9, Ethylene-vinyl alcohol copolymer 25087-26-7, Poly(methacrylic acid) 25249-16-5 25897-89-6, Poly(diacetone acrylamide)

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(ink-jet printing sheet coated with silica-contg. water-insol. and alc.-sol. polymer overcoat layer with luster and good transparency)

IT **73363-10-7**

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(ink-absorbing layer; ink-jet printing sheet coated with silica-contg. water-insol. and alc.-sol. polymer overcoat layer with luster and good transparency)

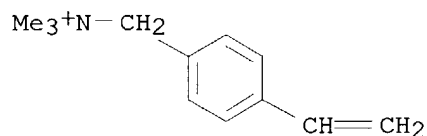
RN 73363-10-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

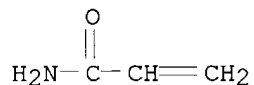


● Cl<sup>-</sup>

CM 2

CRN 79-06-1

CMF C3 H5 N O



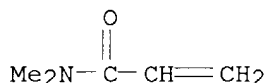
IT **2680-03-7D**, N,N-Dimethylacrylamide, polymers

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(ink-jet printing sheet coated with silica-contg. water-insol. and alc.-sol. polymer overcoat layer with luster and good transparency)

RN 2680-03-7 HCAPLUS

CN 2-Propenamide, N,N-dimethyl- (9CI) (CA INDEX NAME)



L47 ANSWER 36 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:750533 HCAPLUS

DOCUMENT NUMBER: 123:152978

TITLE: Antimicrobial polymer, contact lens, and contact lens care products

INVENTOR(S): Hashimoto, Kazukichi; Inaba, Yoshiko; Shimura, Seiji; Mogami, Takao; Kojima, Tadao; Ushiyama, Yoichi

PATENT ASSIGNEE(S): Nippon Chemical Industrial Co., Ltd., Japan; Seiko Epson Corp.

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9502617	A1	19950126	WO 1994-JP1149	19940713
W: JP, US				
RW: DE, FR, GB				
EP 663409	A1	19950719	EP 1994-921087	19940713
EP 663409	B1	19981007		
R: DE, FR, GB				
US 5520910	A	19960528	US 1995-397055	19950313
PRIORITY APPLN. INFO.:			JP 1993-174238	19930714
			JP 1993-175288	19930715
			JP 1993-175289	19930715
			WO 1994-JP1149	19940713

AB An antimicrobial polymer is prepd. by homo- or copolymg. a vinylphosphonium salt monomer such as 2-methacryloxyethyltri-n-octylphosphonium chloride. A contact lens and contact lens care products both based on an antimicrobial resin comprise a copolymer of a polymerizable monomer with a vinylphosphonium salt monomer. The antimicrobial polymer has a wide antimicrobial spectrum and a sufficient antimicrobial effect even with a short contact time. The lens and lens care products scarcely suffer from microbial contamination and are excellent in optical performance and processability.

IC ICM C08F230-02

ICS C08F008-40; G02C007-02; A01N057-34

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT **2680-03-7P** 110769-39-6P 166740-87-0P 166740-88-1P

166740-89-2P 166740-91-6P 166740-92-7P 166740-93-8P 166740-95-0P  
 166740-97-2P 166740-98-3P 166740-99-4P 166741-00-0P 166741-01-1DP,  
 reaction product with octylphosphine 167173-78-6P 167228-10-6P

**167228-11-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Antimicrobial polymer, contact lens, and contact lens care products).

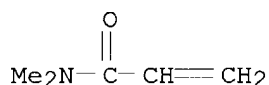
**IT 2680-03-7P 167228-11-7P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Antimicrobial polymer, contact lens, and contact lens care products)

RN 2680-03-7 HCAPLUS

CN 2-Propenamide, N,N-dimethyl- (9CI) (CA INDEX NAME)



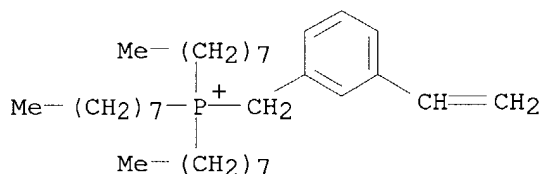
RN 167228-11-7 HCAPLUS

CN Phosphonium, [(3-ethenylphenyl)methyl]trioctyl-, chloride, polymer with 1,2-ethanediyl bis(2-methyl-2-propenoate), [(4-ethenylphenyl)methyl]trioctylphosphonium chloride, 2,2,3,3,4,4,4-heptafluorobutyl 2-methyl-2-propenoate and 3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 144705-73-7

CMF C33 H60 P . Cl

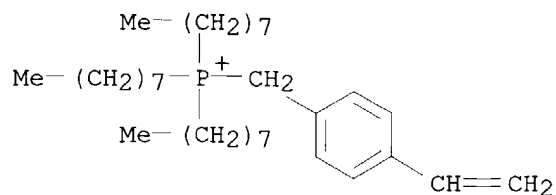


● Cl<sup>-</sup>

CM 2

CRN 74443-79-1

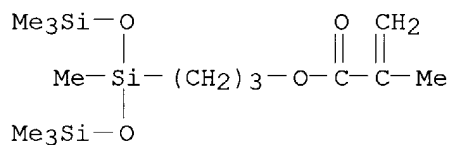
CMF C33 H60 P . Cl



CM 3

CRN 19309-90-1

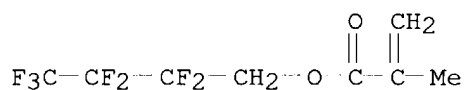
CMF C14 H32 O4 Si3



CM 4

CRN 13695-31-3

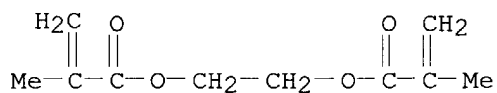
CMF C8 H7 F7 O2



CM 5

CRN 97-90-5

CMF C10 H14 O4



L47 ANSWER 37 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1995:726032 HCAPLUS  
 DOCUMENT NUMBER: 123:127770  
 TITLE: Ink jet recording medium.

INVENTOR(S): Furukawa, Akira; Kato, Makoto  
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 627324	A1	19941207	EP 1994-108527	19940603
EP 627324	B1	19970102		
R: DE, FR, GB				
JP 06340163	A2	19941213	JP 1993-133151	19930603
JP 06340164	A2	19941213	JP 1993-133152	19930603
US 5439739	A	19950808	US 1994-251842	19940601
PRIORITY APPLN. INFO.:			JP 1993-133151	19930603
			JP 1993-133152	19930603

OTHER SOURCE(S): MARPAT 123:127770

AB An ink jet recording medium is obtained by coating a support with a mixt. of 100 parts by wt. of a H<sub>2</sub>O-sol. polymer and 0.1-30 parts by wt. of a crosslinking agent such as an epoxy or triazine crosslinking agent, the H<sub>2</sub>O-sol. polymer being obtained by copolymerizing 10-50 parts by wt. of a quaternary salt monomer selected from trimethyl-3-(acryloylamino)-propylammonium chloride, trimethyl-2-(methacryloyloxy)ethylammonium chloride, etc., 1-30 parts by wt. of an amino group-contg. monomer selected from diethylaminopropylacrylamide, dimethylaminoethyl methacrylate, etc. or a carboxyl group-contg. monomer selected from acrylic acid, methacrylic acid, etc. and 20-80 wt. parts of a monomer selected from acrylamide, 2-hydroxyethyl(meth)acrylate, N-vinylpyrrolidone, etc. The medium is capable of providing recorded images of excellent H<sub>2</sub>O resistance.

IC ICM B41M005-00

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT 166032-04-8 166032-05-9 **166032-06-0** 166032-07-1  
 166032-08-2 166032-09-3 166032-10-6 **166032-11-7**  
 166032-12-8 166032-13-9 **166032-14-0** 166032-15-1  
 166032-16-2 **166032-17-3** 166032-18-4 166032-19-5  
 166032-20-8 **166032-21-9** **166032-22-0**  
**166032-23-1** **166032-24-2** 166240-97-7 166240-98-8  
**166240-99-9** 166241-00-5 166241-01-6 166241-02-7  
 166241-03-8 **166241-04-9** 166241-05-0 166241-06-1  
 166241-08-3 166241-09-4 **166241-10-7** 166241-11-8  
 166241-12-9 166241-13-0 **166241-14-1** **166241-15-2**  
**166241-16-3** **166241-17-4**

RL: DEV (Device component use); USES (Uses)  
 (coating for ink jet printing medium)

IT **166241-07-2**

RL: DEV (Device component use); USES (Uses)  
 (sto coating for ink jet printing medium)

IT **166032-06-0** **166032-11-7** **166032-14-0**  
**166032-17-3** **166032-21-9** **166032-22-0**  
**166032-23-1** **166032-24-2** **166240-99-9**  
**166241-04-9** **166241-10-7** **166241-14-1**

166241-15-2 166241-16-3 166241-17-4

RL: DEV (Device component use); USES (Uses)  
(coating for ink jet printing medium)

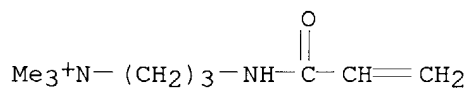
RN 166032-06-0 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride,  
polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt,  
N-[3-(dimethylamino)propyl]-2-propenamide and N,N-dimethyl-2-propenamide  
(9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

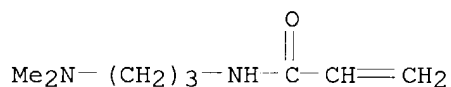
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 3845-76-9

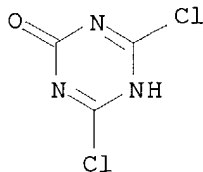
CMF C8 H16 N2 O



CM 3

CRN 2736-18-7

CMF C3 H Cl2 N3 O . Na

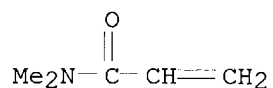


● Na

CM 4



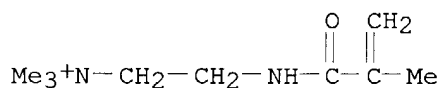
CRN 2680-03-7  
CMF C5 H9 N O



RN 166032-11-7 HCAPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, 2-(dimethylamino)ethyl 2-methyl-2-propenoate and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

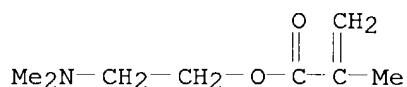
CRN 69174-85-2  
CMF C9 H19 N2 O . Cl



● Cl<sup>-</sup>

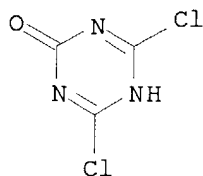
CM 2

CRN 2867-47-2  
CMF C8 H15 N O2



CM 3

CRN 2736-18-7  
CMF C3 H Cl2 N3 O . Na

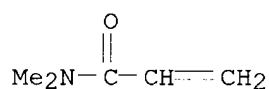


● Na

CM 4

CRN 2680-03-7

CMF C5 H9 N O



RN 166032-14-0 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N-(1,1-dimethyl-3-  
oxobutyl)-2-propenamide and ar-ethenyl-N,N-diethylbenzenemethanamine (9CI)  
(CA INDEX NAME)

CM 1

CRN 30179-69-2

CMF C13 H19 N

CCI IDS



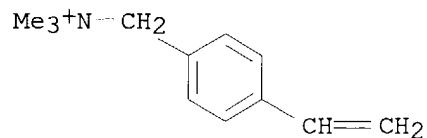
D1- CH=CH2

Et2N-CH2-D1

CM 2

CRN 7538-38-7

CMF C12 H18 N . Cl

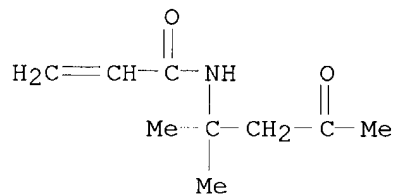


● Cl<sup>-</sup>

CM 3

CRN 2873-97-4

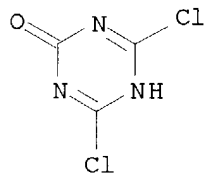
CMF C9 H15 N O2



CM 4

CRN 2736-18-7

CMF C3 H Cl2 N3 O . Na



● Na

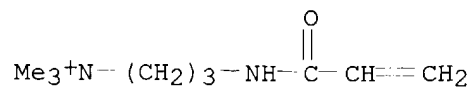
RN 166032-17-3 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N,N-dimethyl-2-propenamamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

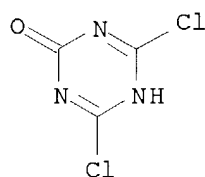
CMF C9 H19 N2 O . Cl



CM 2

CRN 2736-18-7

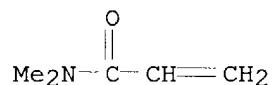
CMF C3 H Cl2 N3 O . Na



CM 3

CRN 2680-03-7

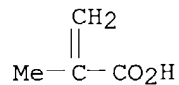
CMF C5 H9 N O



CM 4

CRN 79-41-4

CMF C4 H6 O2



RN 166032-21-9 HCAPLUS

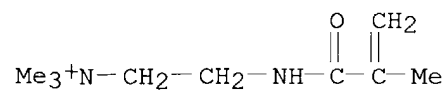
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N,N-dimethyl-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX)

NAME)

CM 1

CRN 69174-85-2

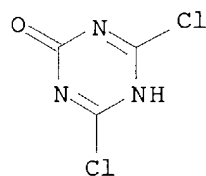
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2736-18-7

CMF C3 H Cl2 N3 O . Na

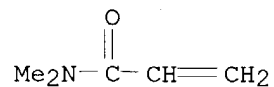


● Na

CM 3

CRN 2680-03-7

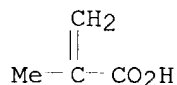
CMF C5 H9 N O



CM 4

CRN 79-41-4

CMF C4 H6 O2



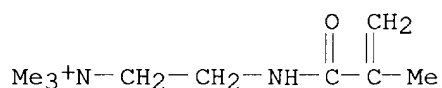
RN 166032-22-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N-(1,1-dimethyl-3-oxobutyl)-2-propenamamide, N,N-dimethyl-2-propenamamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2

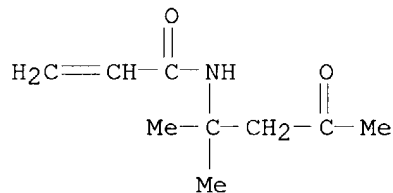
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2873-97-4

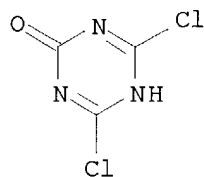
CMF C9 H15 N O2



CM 3

CRN 2736-18-7

CMF C3 H Cl2 N3 O . Na

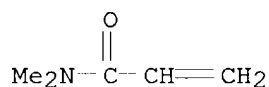


● Na

CM 4

CRN 2680-03-7

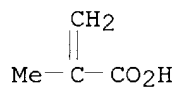
CMF C5 H9 N O



CM 5

CRN 79-41-4

CMF C4 H6 O2



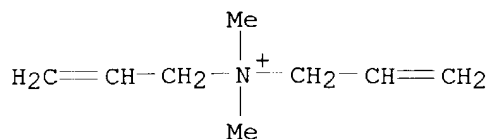
RN 166032-23-1 HCAPLUS

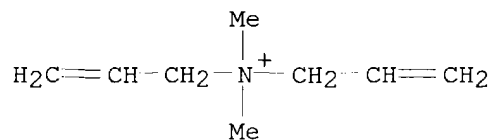
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

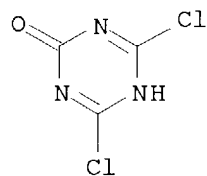
● Cl<sup>-</sup>



CM 2

CRN 2736-18-7

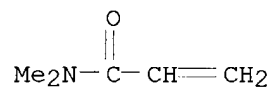
CMF C3 H Cl2 N3 O . Na



CM 3

CRN 2680-03-7

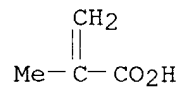
CMF C5 H9 N O



CM 4

CRN 79-41-4

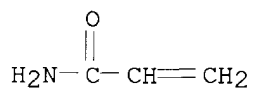
CMF C4 H6 O2



CM 5



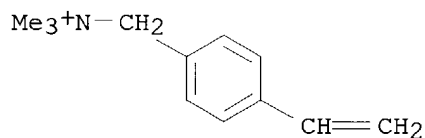
CRN 79-06-1  
CMF C3 H5 N O



RN 166032-24-2 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 4,6-dichloro-1,3,5-triazin-2(1H)-one sodium salt, N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

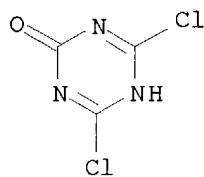
CRN 7538-38-7  
CMF C12 H18 N . Cl



● Cl<sup>-</sup>

CM 2

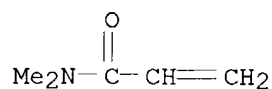
CRN 2736-18-7  
CMF C3 H Cl2 N3 O . Na



● Na

CM 3

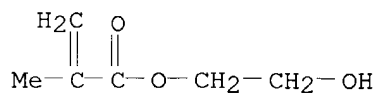
CRN 2680-03-7  
CMF C5 H9 N O



CM 4

CRN 868-77-9

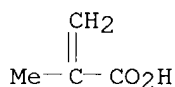
CMF C6 H10 O3



CM 5

CRN 79-41-4

CMF C4 H6 O2



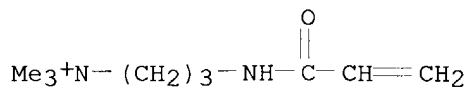
RN 166240-99-9 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, N,N-dimethyl-2-propenamide and 1,2,3-propanetriol homopolymer oxiranylmethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 45021-77-0

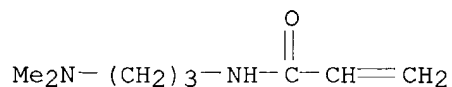
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 3845-76-9

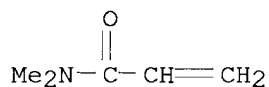
CMF C8 H16 N2 O



CM 3

CRN 2680-03-7

CMF C5 H9 N O



CM 4

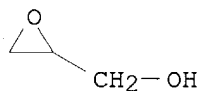
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 5

CRN 556-52-5

CMF C3 H6 O2



CM 6

CRN 25618-55-7

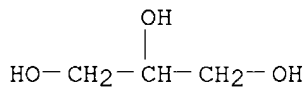
CMF (C3 H8 O3)x

CCI PMS

CM 7

CRN 56-81-5

CMF C3 H8 O3



RN 166241-04-9 HCAPLUS

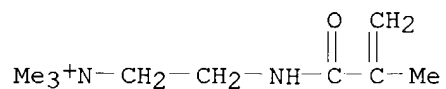
CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)amino]-, chloride,  
polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate,  
N,N-dimethyl-2-propenamide and 1,2,3-propanetriol homopolymer

oxiranylmethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2

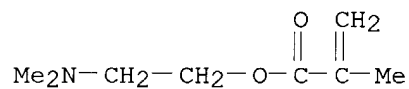
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2867-47-2

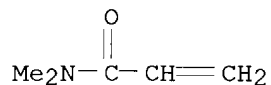
CMF C8 H15 N O2



CM 3

CRN 2680-03-7

CMF C5 H9 N O



CM 4

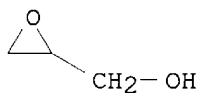
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 5

CRN 556-52-5

CMF C3 H6 O2

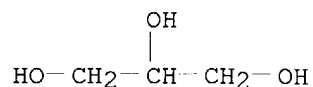


CM 6

CRN 25618-55-7  
 CMF (C3 H8 O3)x  
 CCI PMS

CM 7

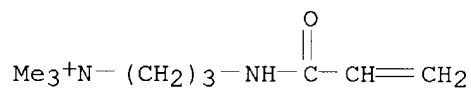
CRN 56-81-5  
 CMF C3 H8 O3



RN 166241-10-7 HCAPLUS  
 CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride,  
 polymer with N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid and  
 1,2,3-propanetriol homopolymer oxiranylmethyl ether (9CI) (CA INDEX NAME)

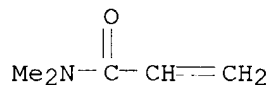
CM 1

CRN 45021-77-0  
 CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

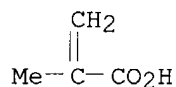
CM 2

CRN 2680-03-7  
 CMF C5 H9 N O



CM 3

CRN 79-41-4  
 CMF C4 H6 O2



CM 4

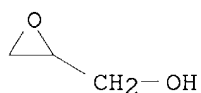
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 5

CRN 556-52-5

CMF C3 H6 O2



CM 6

CRN 25618-55-7

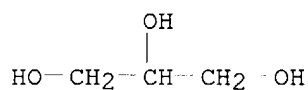
CMF (C3 H8 O3)x

CCI PMS

CM 7

CRN 56-81-5

CMF C3 H8 O3



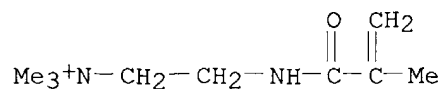
RN 166241-14-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid and 1,2,3-propanetriol homopolymer oxiranylmethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2

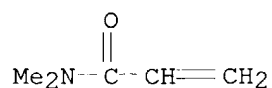
CMF C9 H19 N2 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 2680-03-7

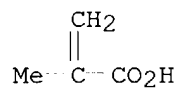
CMF C5 H9 N O



CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

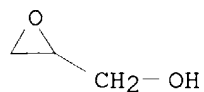
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 5

CRN 556-52-5

CMF C3 H6 O2



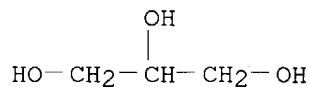
CM 6

CRN 25618-55-7

CMF (C3 H8 O3)x

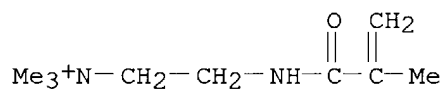
CCI PMS

CM 7

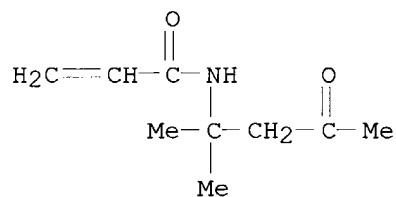
CRN 56-81-5  
CMF C3 H8 O3

RN 166241-15-2 HCAPLUS  
 CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid and 1,2,3-propanetriol homopolymer oxiranylmethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 69174-85-2  
CMF C9 H19 N2 O . Cl● Cl<sup>-</sup>

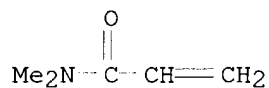
CM 2

CRN 2873-97-4  
CMF C9 H15 N O2

CM 3

CRN 2680-03-7  
CMF C5 H9 N O

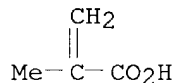




CM 4

CRN 79-41-4

CMF C4 H6 O2



CM 5

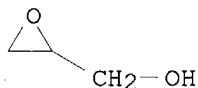
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 6

CRN 556-52-5

CMF C3 H6 O2



CM 7

CRN 25618-55-7

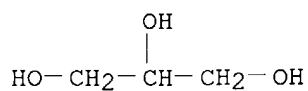
CMF (C3 H8 O3)x

CCI PMS

CM 8

CRN 56-81-5

CMF C3 H8 O3



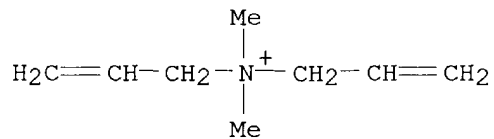
RN 166241-16-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, polymer with  
N,N-dimethyl-2-propenamide, 2-methyl-2-propenoic acid, 1,2,3-propanetriol  
homopolymer oxiranylmethyl ether and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

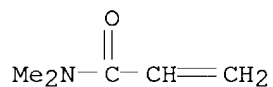
CMF C8 H16 N . Cl



CM 2

CRN 2680-03-7

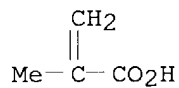
CMF C5 H9 N O



CM 3

CRN 79-41-4

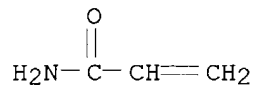
CMF C4 H6 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



CM 5

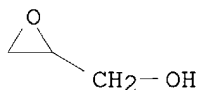
CRN 118549-88-5

CMF (C3 H8 O3)x . x C3 H6 O2

CM 6

CRN 556-52-5

CMF C3 H6 O2



CM 7

CRN 25618-55-7

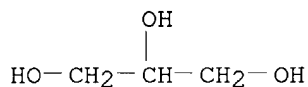
CMF (C3 H8 O3)x

CCI PMS

CM 8

CRN 56-81-5

CMF C3 H8 O3



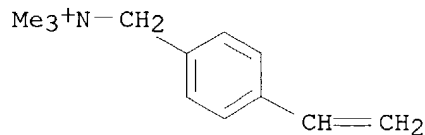
RN 166241-17-4 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with N,N-dimethyl-2-propenamide, 2-hydroxyethyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and 1,2,3-propanetriol homopolymer oxiranylmethyl ether (9CI) (CA INDEX NAME)

CM 1

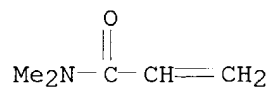
CRN 7538-38-7

CMF C12 H18 N . Cl

● Cl<sup>-</sup>

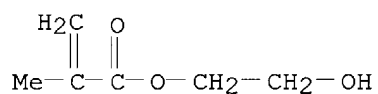
CM 2

CRN 2680-03-7  
CMF C5 H9 N O



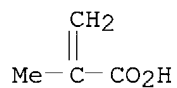
CM 3

CRN 868-77-9  
CMF C6 H10 O3



CM 4

CRN 79-41-4  
CMF C4 H6 O2

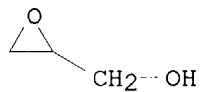


CM 5

CRN 118549-88-5  
CMF (C3 H8 O3)x . x C3 H6 O2

CM 6

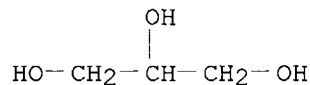
CRN 556-52-5  
CMF C3 H6 O2



CM 7

CRN 25618-55-7  
CMF (C3 H8 O3)x  
CCI PMS

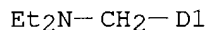
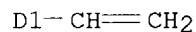
CM 8

CRN 56-81-5  
CMF C3 H8 O3IT **166241-07-2**RL: DEV (Device component use); USES (Uses)  
(sto coating for ink jet printing medium)

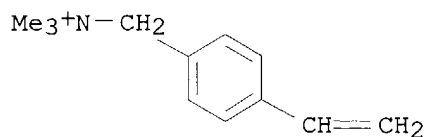
RN 166241-07-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ar-ethenyl-N,N-  
diethylbenzenemethanamine and 1,2,3-propanetriol homopolymer  
oxiranylmethyl ether (9CI) (CA INDEX NAME)

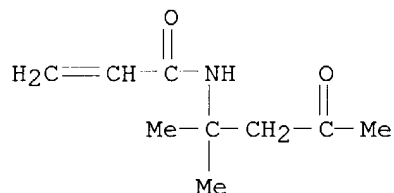
CM 1

CRN 30179-69-2  
CMF C13 H19 N  
CCI IDS

CM 2

CRN 7538-38-7  
CMF C12 H18 N . Cl

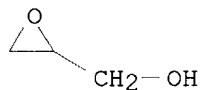
CM 3

CRN 2873-97-4  
CMF C9 H15 N O2

CM 4

CRN 118549-88-5  
CMF (C3 H8 O3)x . x C3 H6 O2

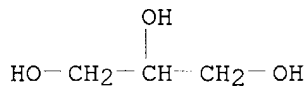
CM 5

CRN 556-52-5  
CMF C3 H6 O2

CM 6

CRN 25618-55-7  
CMF (C3 H8 O3)x  
CCI PMS

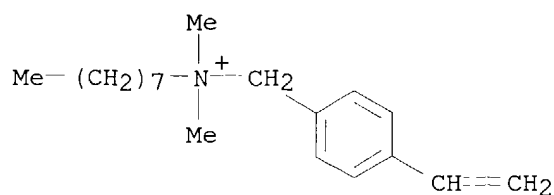
CM 7

CRN 56-81-5  
CMF C3 H8 O3

L47 ANSWER 38 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1995:382840 HCAPLUS  
DOCUMENT NUMBER: 122:142666  
TITLE: antimicrobial **hydrogel** and its use in  
manufacturing antimicrobial soft contact lenses

INVENTOR(S): Matsuzawa, Hiroshi; Iwamoto, Eiju  
 PATENT ASSIGNEE(S): Hoya Corp, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 06337378	A2	19941206	JP 1993-129308	19930531
PRIORITY APPLN. INFO.:				JP 1993-129308	19930531
AB	Antimicrobial <b>hydrogel</b> is prepd. with 2-hydroxyethyl methacrylate and p-vinylbenzyl dimethyloctylammonium chloride or 2-methacryloxyethyl dimethyloctylammonium chloride and the corresponding hexadecyl analogs and is used in manufg. antimicrobial soft contact lenses. The lenses showed excellent oxygen permeability and biocompatibility.				
IC	ICM G02C007-04				
CC	ICS A61L027-00; C08F212-14; C08F220-28; C08F220-34				
ST	63-7 (Pharmaceuticals)				
IT	Section cross-reference(s): 38				
IT	antimicrobial <b>hydrogel</b> soft contact lens				
IT	Bactericides, Disinfectants, and Antiseptics				
IT	(prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	Lenses				
IT	(contact, soft, prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	<b>Gels</b>				
IT	RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
IT	(hydro-, prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	1592-20-7, p-Vinylbenzyl chloride 7378-99-6, Dimethyl-n-octylamine				
IT	RL: RCT (Reactant); RACT (Reactant or reagent)				
IT	(prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	<b>98473-87-1P</b>				
IT	RL: SPN (Synthetic preparation); PREP (Preparation)				
IT	(prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	868-77-9DP, copolymers <b>161233-91-6P</b> 161233-93-8P				
IT	<b>161233-94-9P</b> 161233-96-1P				
IT	RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
IT	(prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
IT	<b>98473-87-1P</b>				
IT	RL: SPN (Synthetic preparation); PREP (Preparation)				
IT	(prepn. of antimicrobial <b>hydrogel</b> and its use in manufg. antimicrobial soft contact lenses)				
RN	98473-87-1 HCAPLUS				
CN	Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-octyl-, chloride (9CI) (CA INDEX NAME)				



● Cl<sup>-</sup>

IT 161233-91-6P 161233-94-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of antimicrobial **hydrogel** and its use in manufg.  
antimicrobial soft contact lenses)

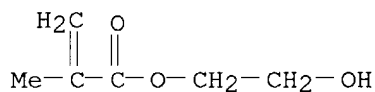
RN 161233-91-6 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-octyl-, chloride, polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9

CMF C6 H10 O3



CM 2

CRN 98473-88-2

CMF (C19 H32 N . Cl)x

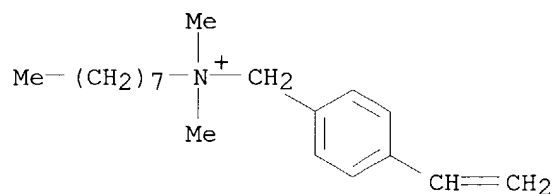
CCI PMS

CM 3

CRN 98473-87-1

CMF C19 H32 N . Cl



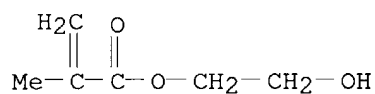


● Cl<sup>-</sup>

RN 161233-94-9 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N-hexadecyl-N,N-dimethyl-, chloride,  
 polymer with 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 868-77-9  
 CMF C6 H10 O3

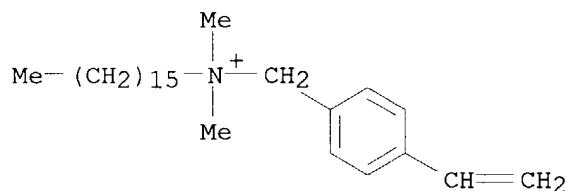


CM 2

CRN 87833-72-5  
 CMF (C27 H48 N . Cl)x  
 CCI PMS

CM 3

CRN 87810-16-0  
 CMF C27 H48 N . Cl



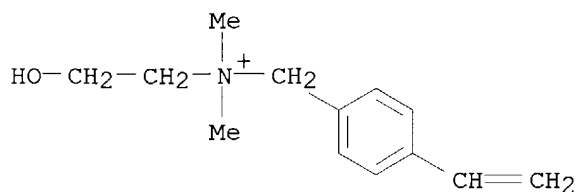
● Cl<sup>-</sup>

L47 ANSWER 39 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1993:577150 HCAPLUS

DOCUMENT NUMBER: 119:177150  
 TITLE: Polyvinylbenzyl ammonium or sulfonium or phosphonium  
 polymer-based membrane for **chemiluminescent**  
 blotting applications  
 INVENTOR(S): Bronstein, Irena; Edwards, Brooks; Voyta, John  
 PATENT ASSIGNEE(S): Tropix, Inc., USA  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

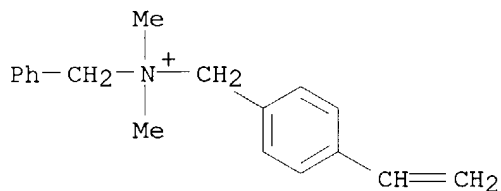
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313405	A1	19930708	WO 1992-US10803	19921218
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
US 5336596	A	19940809	US 1991-811620	19911223
AU 9332792	A1	19930728	AU 1993-32792	19921218
AU 671609	B2	19960905		
EP 619018	A1	19941012	EP 1993-901318	19921218
EP 619018	B1	19981125		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 173821	E	19981215	AT 1993-901318	19921218
ES 2124781	T3	19990216	ES 1993-901318	19921218
US 5593828	A	19970114	US 1994-233850	19940426
FI 9403027	A	19940622	FI 1994-3027	19940622
NO 9402386	A	19940622	NO 1994-2386	19940622
US 5827650	A	19981027	US 1996-590352	19960123
PRIORITY APPLN. INFO.:			US 1991-811620	19911223
			WO 1992-US10803	19921218
			US 1994-233850	19940426
AB	A membrane comprising a support (e.g. nitrocellulose, PVDF, or nylon) coated with a polyvinylbenzyl quaternary salt (e.g. sulfonium, phosphonium, or ammonium) polymer is used for blotting assays having reduced background noise and improved sensitivity and reliability. The blotting assay uses enzyme-labeled antibody or nucleic acid probe and enzyme-cleavable 1,2-dioxetane (e.g. AMPPD or CSPD) for analyte detn. Thus, nitrocellulose or PVDF or nylon coated with polyvinylbenzylphenylureidoethyl dimethyl ammonium chloride/polyvinylbenzylbenzoylaminoethyl dimethyl ammonium chloride copolymer and alk. phosphatase-labeled anti-mouse IgG antibody were used in a Western blotting anal.			
IC	B23B027-30; B23B023-08 ICM G01N021-76 ICS G01N033-544			
CC	9-10 (Biochemical Methods) Section cross-reference(s): 3			
IT	Immunoassay (chemiluminescence, immunoblotting, polyvinylbenzyl quaternary salt polymer-coated support for)			
IT	88353-58-6 114783-41-4 150042-57-2 150042-59-4 150042-60-7 150042-61-8 150042-63-0 150042-64-1			

RL: ANST (Analytical study)  
 (support coated with, for blotting anal.)  
 IT **88353-58-6 114783-41-4 150042-57-2**  
**150042-59-4 150042-60-7 150042-61-8**  
**150042-63-0 150042-64-1**  
 RL: ANST (Analytical study)  
 (support coated with, for blotting anal.)  
 RN 88353-58-6 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N-(2-hydroxyethyl)-N,N-dimethyl-,  
 chloride, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 61735-87-3  
 CMF C13 H20 N O . Cl



● Cl<sup>-</sup>

RN 114783-41-4 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride,  
 homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 66099-76-1  
 CMF C18 H22 N . Cl



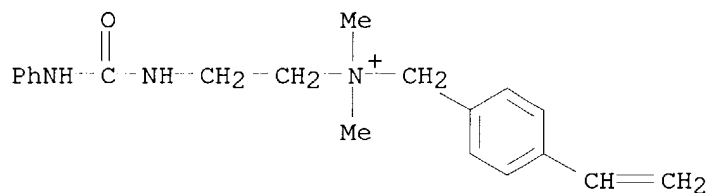
● Cl<sup>-</sup>

RN 150042-57-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-[2-  
 [[(phenylamino)carbonyl]amino]ethyl]-, chloride, homopolymer (9CI) (CA  
 INDEX NAME)

CM 1

CRN 150042-56-1

CMF C20 H26 N3 O . Cl

● Cl<sup>-</sup>

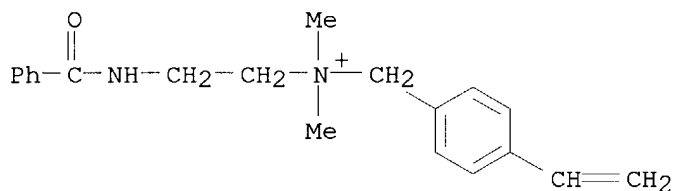
RN 150042-59-4 HCAPLUS

CN Benzenemethanaminium, N-[2-(benzoylamino)ethyl]-4-ethenyl-N,N-dimethyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 150042-58-3

CMF C20 H25 N2 O . Cl

● Cl<sup>-</sup>

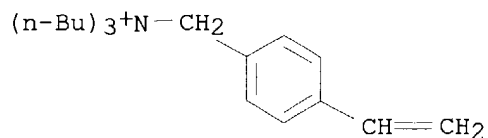
RN 150042-60-7 HCAPLUS

CN Benzenemethanaminium, N,N,N-tributyl-4-ethenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 56343-19-2

CMF C21 H36 N . Cl



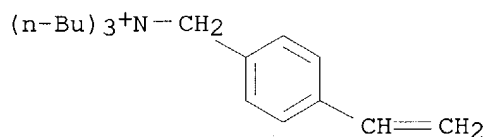
● Cl<sup>-</sup>

RN 150042-61-8 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trihexyl-, chloride, polymer with  
 N,N,N-tributyl-4-ethenylbenzenemethanaminium chloride (9CI) (CA INDEX  
 NAME)

CM 1

CRN 56343-19-2

CMF C21 H36 N . Cl

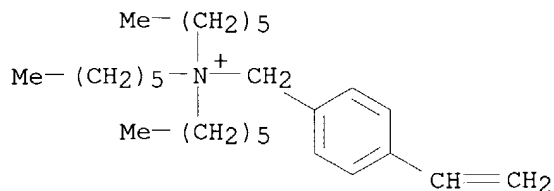


● Cl<sup>-</sup>

CM 2

CRN 56343-11-4

CMF C27 H48 N . Cl



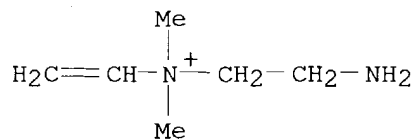
● Cl<sup>-</sup>

RN 150042-63-0 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, chloride,  
 polymer with N-(2-aminoethyl)-N,N-dimethylethenaminium chloride (9CI) (CA  
 INDEX NAME)

CM 1

CRN 150042-62-9

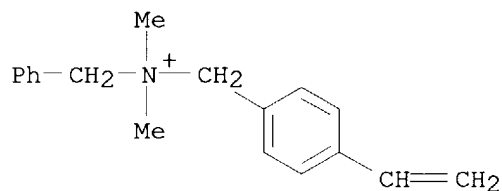
CMF C6 H15 N2 . Cl

● Cl<sup>-</sup>

CM 2

CRN 66099-76-1

CMF C18 H22 N . Cl

● Cl<sup>-</sup>

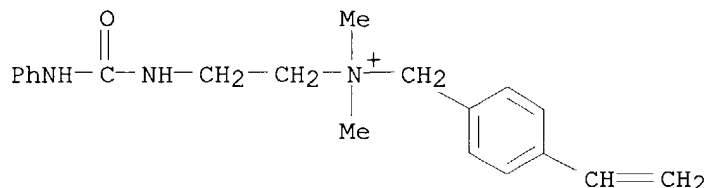
RN 150042-64-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N-dimethyl-N-[2-  
 [[(phenylamino)carbonyl]amino]ethyl]-, chloride, polymer with  
 4-ethenyl-N,N-dimethyl-N-(phenylmethyl)benzenemethanaminium chloride (9CI)  
 (CA INDEX NAME)

CM 1

CRN 150042-56-1

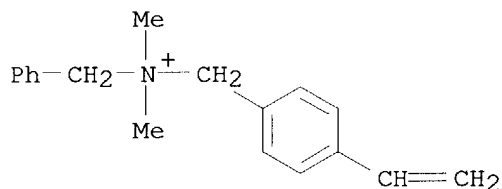
CMF C20 H26 N3 O . Cl

● Cl<sup>-</sup>

CM 2

CRN 66099-76-1

CMF C18 H22 N . Cl

● Cl<sup>-</sup>

L47 ANSWER 40 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:436233 HCAPLUS

DOCUMENT NUMBER: 119:36233

TITLE: Electrochemical characterization of size-quantized semiconductor particulate films at monolayer interfaces

AUTHOR(S): Fendler, Janos H.

CORPORATE SOURCE: Dep. Chem., Syracuse Univ., Syracuse, NY, 13244-4100, USA

SOURCE: Electrochem. Colloids Dispersions, [Symp. Electrochem. Microheterog. Fluids] (1992), 475-87. Editor(s): Mackay, Raymond A.; Texter, John. VCH: New York, N.Y. CODEN: 58XTAL

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Semiconductor particulate films, prepd. at neg. charged monolayer interfaces and transferred to **solid supports**, were characterized by reflectivity, absorption spectrophotometry, TEM, scanning tunneling microscopy, and elec. measurements. Plots of absorbances at a given wavelength against thickness were linear for CdS and ZnS particulate films. Direct band gaps for 63, 125, 163, 204, 263, and 298 .ANG. thick, CdS particulate films were found, resp., to be 2.54, 2.48, 2.46, 2.44,

2.43, and 2.42 eV. Similarly, a direct band gap of 3.75 eV was assessed for a 458 .ANG. thick ZnS particulate film. Transmission electron micrographs of CdS films revealed CdS particles in a narrow size distribution with av. diams. of 47 .ANG.. The presence of 20-30 .ANG. thick, 40-50 .ANG. diam. CdS and 10-25 .ANG. thick, 30-40 .ANG. diam. ZnS particles in CdS and ZnS films were discerned by scanning tunneling microscopy. CdS films had dark resistivities of (3 .times. 10<sup>7</sup>) (6 .times. 10<sup>7</sup>) .OMEGA. cm, which decreased upon illumination; they also developed photovoltages upon illumination. Cd sulfide particulate films, generated at arachidic acid monolayer interfaces to 300 .+- 50 .ANG. thickness, were characterized in situ by scanning tunneling microscopy (STM) under potentiostatic control. Elec. contact was made between the tip of the scanning tunneling microscope, acting as the working electrode (WE) in contact with the CdS particulate film floating on aq. 0.30M NaCl, and the ref. (RE) and counter (CE) electrodes, placed in the subphase. A well-defined single-redn. wave at .apprx.-1.15 V was obsd. Prolonged exposure to room light shifted the redn. peak to -0.85 V.

CC 72-2 (Electrochemistry)

Section cross-reference(s): 65, 66, 76

IT Surface structure

(of semiconductor particulate films on **solid support**)

IT 76901-54-7, PSP (polymer) **96478-22-7**

RL: PRP (Properties)

(in semiconductor particulate film prepn.)

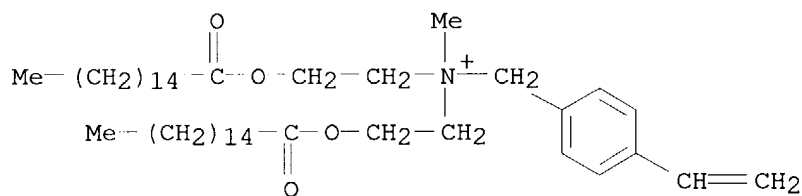
IT **96478-22-7**

RL: PRP (Properties)

(in semiconductor particulate film prepn.)

RN 96478-22-7 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N-methyl-N,N-bis[2-[(1-oxohexadecyl)oxy]ethyl]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

L47 ANSWER 41 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:18077 HCAPLUS

DOCUMENT NUMBER: 116:18077

TITLE: Apparatus and method using amine polymers as coagulator accelerators in blood phase separation

INVENTOR(S): Corin, Alan Franklin; Columbus, Richard Lewis; Freyler, Deborah Paula

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW



DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 438192	A1	19910724	EP 1991-200040	19910110
R: BE, CH, DE, FR, GB, IT, LI, LU, NL				
CA 2032816	AA	19910717	CA 1990-2032816	19901220
JP 06249849	A2	19940909	JP 1991-2741	19910114
PRIORITY APPLN. INFO.:			US 1990-465835	19900116

AB An app. and a method are described, wherein a coagulator accelerator is added to a container to achieve agglutination of blood cells when centrifuging whole blood, allowing the serum to be more easily poured off. The accelerator is selected from polymeric amines that are either polyamd. amino acids or vinyl addn. polymer amines, with a specified mol. wt. range, the vinyl addn. amines being selected to avoid lysing the blood cells. Prepn. of poly(2-aminoethyl methacrylate.HCl) (I) is described. I at 0.92 mg/mL gave a preferred amt. of agglutination (the clump stayed together even when the container was inverted) and the sepd. serum remained clear.

IC ICM G01N033-48  
 ICA B01D043-00  
 CC 9-6 (Biochemical Methods)  
 Section cross-reference(s): 35

IT **Polyamides, biological studies**  
 RL: BIOL (Biological study)  
 (poly(amino acids), as blood-coagulation accelerators for blood sepn.)

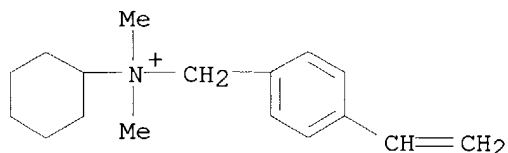
IT 25104-18-1, Polylysine 64080-86-0 64696-45-3 **67252-58-8**  
 82752-13-4 94901-16-3 125635-53-2 137843-13-1 137843-14-2  
 137843-15-3 137843-17-5  
 RL: BIOL (Biological study)  
 (blood-coagulation accelerator for blood sepn.)

IT **67252-58-8**  
 RL: BIOL (Biological study)  
 (blood-coagulation accelerator for blood sepn.)

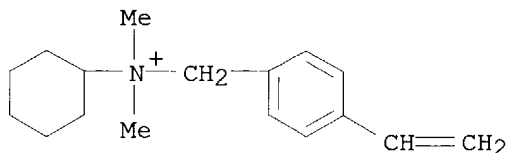
RN 67252-58-8 HCAPLUS  
 CN Benzenemethanaminium, N-cyclohexyl-4-ethenyl-N,N-dimethyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 67252-57-7  
 CMF C17 H26 N . Cl



● Cl<sup>-</sup>



● Cl<sup>-</sup>

L47 ANSWER 42 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:597553 HCAPLUS

DOCUMENT NUMBER: 113:197553

TITLE: Ionic complex for enhancing performance of water desalination membranes

INVENTOR(S): Wessling, Ritchie A.; Whipple, Sharon S.; Fibiger, Richard F.

PATENT ASSIGNEE(S): Dow Chemical Co., USA

SOURCE: U.S., 9 pp. Cont. of U.S. Ser. No. 903,640, abandoned.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4927540	A	19900522	US 1988-185323	19880419
PRIORITY APPLN. INFO.:			US 1986-903640	19860904
OTHER SOURCE(S):		MARPAT 113:197553		

AB A reverse osmosis membrane for enhanced salt rejection in desalination comprises a semipermeable reverse osmosis membrane having a 1st discriminating layer as a supporting surface and, affixed to the supporting surface, a 2nd thin film layer comprising an ionic complex of a 1st compd. bearing .gtoreq.1 quaternary ammonium, imidazolinium, or pyridinium group and a 2nd compd. bearing .gtoreq.1 carboxylate, phosphonate, or sulfonate group, where .gtoreq.1 of the 1st and 2nd compds. is a polymer or prepolymer and also bears an av. of >1 ionic groups/mol. A membrane of the invention is an asym. cellulose triacetate reverse osmosis membrane treated 1st with crotonic acid-vinyl acetate copolymer and 2nd with 3-(trimethoxysilyl)propyloctadecyldimethyl ammonium chloride.

IC ICM B01D013-00

ICS B01D013-01

NCL 210638000

CC 61-4 (Water)

Section cross-reference(s): 37

IT **Polyamides, uses and miscellaneous**

RL: DEV (Device component use); USES (Uses)

(composite membrane from, for reverse osmosis, for enhanced desalination)

IT 123-03-5, Cetyl pyridinium chloride 1652-63-7, FC 135 9004-35-7,  
Cellulose acetate 9012-09-3, Cellulose triacetate 9035-69-2, Cellulose  
diacetate 25609-89-6, Crotonic acid-vinyl acetate copolymer

27029-33-0, Maleamic acid-styrene copolymer 31693-08-0 50658-75-8

83044-99-9, m-Phenylenediamine-trimesoyl chloride copolymer

**87833-71-4** 130171-49-2 130171-50-5

RL: DEV (Device component use); USES (Uses)

(composite membrane from, for reverse osmosis, for enhanced desalination)

IT **87833-71-4**

RL: DEV (Device component use); USES (Uses)

(composite membrane from, for reverse osmosis, for enhanced desalination)

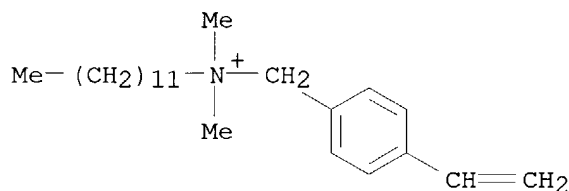
RN 87833-71-4 HCAPLUS

CN Benzenemethanaminium, N-dodecyl-4-ethenyl-N,N-dimethyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 56307-84-7

CMF C23 H40 N . Cl

● Cl<sup>-</sup>

L47 ANSWER 43 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:116214 HCAPLUS

DOCUMENT NUMBER: 110:116214

TITLE: Novel polyamide reverse-osmosis composite membranes

INVENTOR(S): Fibiger, Richard F.; Koo, Ja Young; Forgach, David J.; Petersen, Robert J.; Schmidt, Donald L.; Wessling, Ritchie A.; Stocker, Thomas F.

PATENT ASSIGNEE(S): Dow Chemical Co., USA

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4769148	A	19880906	US 1987-122307	19871118
US 4859384	A	19890822	US 1988-205576	19880613
EP 316525	A2	19890524	EP 1988-113868	19880825
EP 316525	A3	19900516		
EP 316525	B1	19921202		

R: BE, DE, FR, GB, IT, NL

CA 1333462	A1	19941213	CA 1988-576135	19880831
AU 8821768	A1	19890518	AU 1988-21768	19880901
AU 611474	B2	19910613		
NO 8803948	A	19890519	NO 1988-3948	19880905
NO 172030	B	19930222		
NO 172030	C	19930602		
DK 8804958	A	19890519	DK 1988-4958	19880906
DK 174264	B1	20021028		
BR 8804600	A	19890523	BR 1988-4600	19880906
JP 01130707	A2	19890523	JP 1988-221503	19880906
JP 2727087	B2	19980311		
CN 1033187	A	19890531	CN 1988-106576	19880906
CN 1023866	B	19940223		
ZA 8806618	A	19900530	ZA 1988-6618	19880906

## PRIORITY APPLN. INFO.:

US 1987-122307 A3 19871118

AB Title membranes comprise a microporous support and a polyamide discriminating layer derived from reaction of polyamines [e.g., (substituted) piperazines, piperidines, and cyclohexanes bearing .gtoreq.2 amine groups], and arom. or cycloaliph. acyl halides in the presence of an ionic polymeric wetting agent bearing onium groups. Thus, a 6-mil Udel P 3500 film was immersed 1-2 min in an aq. soln. contg. 4% piperazine, 4% Et3N, and 2000 ppm wetting agent of hydroxyethyl methacrylate-p-nonylphenoxynonaethoxyethyl methacrylate-vinylbenzyltrimethylsulfonium chloride copolymer, and then a soln. of 0.1% trimesoyl chloride in CCl2FCClF2 to give a membrane showing water flux at 25.degree. 23 gal/ft2/day, and MgSO4 rejection 92%.

IC ICM B01D013-00

NCL 210500380

CC 38-3 (Plastics Fabrication and Uses)

IT **Polyamides, uses and miscellaneous**

RL: USES (Uses)

(composite membranes, reverse-osmosis, with polysulfone)

IT 59821-61-3 59821-62-4 79122-60-4 **86713-73-7** 86713-77-1  
 86713-85-1 90802-89-4 119408-98-9 119408-99-0 119409-00-6  
 119409-01-7 119409-02-8 119409-03-9 119409-04-0 119409-05-1  
 119565-61-6 119592-91-5

RL: USES (Uses)

(composite membranes, reverse-osmosis, with polysulfone)

IT 9017-80-5, Poly(vinylbenzyltrimethylammonium chloride) 9074-69-5  
 90216-73-2 111570-13-9 111570-14-0 114355-33-8, Fibrabon 35  
 119432-34-7 119432-35-8 119432-36-9 **119432-37-0**  
 119432-38-1

RL: USES (Uses)

(wetting agents, in manuf. of polyamides for reverse-osmosis composite membranes)

IT **86713-73-7**

RL: USES (Uses)

(composite membranes, reverse-osmosis, with polysulfone)

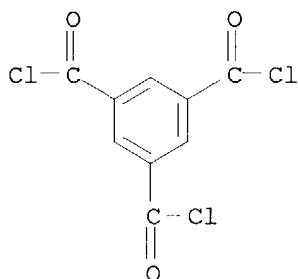
RN 86713-73-7 HCAPLUS

CN 1,3,5-Benzenetricarbonyl trichloride, polymer with 1,2-ethanediamine (9CI)  
 (CA INDEX NAME)

CM 1

CRN 4422-95-1

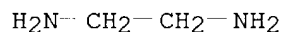
CMF C9 H3 Cl3 O3



CM 2

CRN 107-15-3

CMF C2 H8 N2



IT 119432-37-0

RL: USES (Uses)

(wetting agents, in manuf. of polyamides for reverse-osmosis composite membranes)

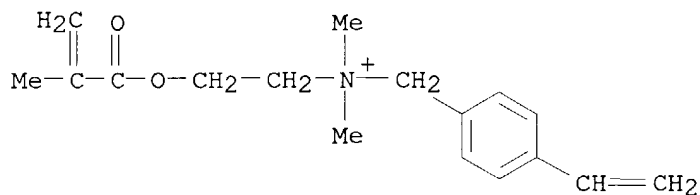
RN 119432-37-0 HCAPLUS

CN Benzenemethanaminium, N-dodecyl-4-ethenyl-N,N-dimethyl-, chloride, polymer with 4-ethenyl-N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]benzenemethanaminium chloride, [(ethenylphenyl)methyl]dimethylsulfonium chloride and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 111590-82-0

CMF C17 H24 N O2 . Cl

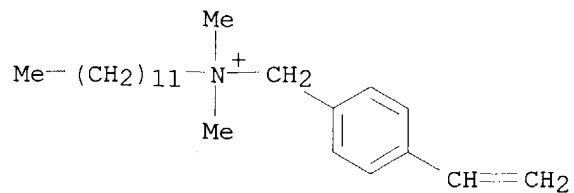


●  $\text{Cl}^-$

CM 2

CRN 56307-84-7

CMF C23 H40 N . Cl

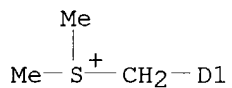
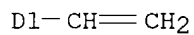


CM 3

CRN 29562-34-3

CMF C11 H15 S . Cl

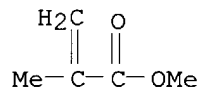
CCI IDS



CM 4

CRN 80-62-6

CMF C5 H8 O2



L47 ANSWER 44 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1986:155971 HCAPLUS  
 DOCUMENT NUMBER: 104:155971  
 TITLE: Preparation of microcapsules containing  
 physiologically active substances such as hemoglobins  
 and enzymes  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60110330	A2	19850615	JP 1983-217375	19831118
JP 62048533	B4	19871014		

PRIORITY APPLN. INFO.: JP 1983-217375 19831118

AB Microcapsules contg. physiol. active substances such as Hb and enzymes are  
 prepd. using **hydrogel** membranes of ion-pair complexes. The  
 capsule membranes prevent the degradn. of the physiol. active substances.  
 Thus, 0.8 parts (by vol.) aq. soln. contg. 1% Hb and 1%  
 poly[N,N,N-trimethyl-N-(4-vinylbenzyl)ammonium chloride] was added to 1.0  
 part (by vol.) AcOEt contg. poly(4-vinylphenol). This emulsion was added  
 to 10 parts 2% gelatin soln. The pH was adjusted to 5.0 with 0.1N HCl  
 until the odor of AcOEt disappeared. The pH was then increased to 10.0  
 with 0.1N NaOH. Capsules produced were isolated by centrifugation.

IC ICM B01J013-02  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 7  
 ST microcapsule **hydrogel** Hb enzyme  
 IT Enzymes  
 Hemoglobins  
 RL: BIOL (Biological study)  
 (**hydrogel** microcapsules contg.)

IT **Gels**  
 (**hydro**-, microencapsulation by, of Hb and enzymes)

IT Encapsulation  
 (micro-, of Hb and enzyme by **hydrogels**)

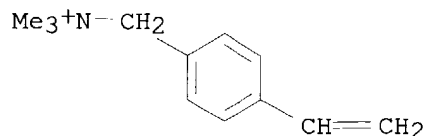
IT 24979-70-2 **26780-21-2**  
 RL: BIOL (Biological study)  
 (microencapsulation by, of Hb)

IT **26780-21-2**  
 RL: BIOL (Biological study)  
 (microencapsulation by, of Hb)

RN 26780-21-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer  
 (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7  
 CMF C12 H18 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 45 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1985:87722 HCAPLUS  
 DOCUMENT NUMBER: 102:87722  
 TITLE: Recording paper for thermal transfer  
 PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59064393	A2	19840412	JP 1982-175992	19821005
JP 04007318	B4	19920210		

PRIORITY APPLN. INFO.: JP 1982-175992 19821005  
 AB The title paper is used for accepting selective thermal transfer of color images by laying it on a transfer paper that has a supported color layer contg. a colorant which is **solid** or semisolid at room temp. and by application of heat. The recording paper has a layer consisting of a polymer contg. the repeating unit having the general formula -CH<sub>2</sub>C(R)(ZnZlRl)- (where R = H, Cl-6 alkyl; Z = Cl-6 alkylene, C6-10 arylene, C7-11 arylenealkylene, CO<sub>2</sub>R<sub>2</sub>, CONHR<sub>2</sub>; R<sub>2</sub> = groups described for Z; Z<sub>2</sub> = SO<sub>2</sub>, CO, OCO, SO, (NR<sub>3</sub>CO)<sub>m</sub> NR<sub>3</sub>SO<sub>2</sub>; R<sub>3</sub> = H, Cl-12 alkyl, Cl-12 aryl; m = 1,2; R<sub>1</sub> = CH:CHR<sub>4</sub>, CH<sub>2</sub>CHR<sub>4</sub>R<sub>5</sub>, I; R<sub>4</sub> = groups described for R; R<sub>5</sub> = groups substituted by nucleophilic reaction; n = 0,1; Z<sub>2</sub> = OCO when n = 3). The recording paper provides transferred images having higher d. than usually achieved by methods employing dye transfer. Thus, a homopolymer having the repeating unit II 4 and diacetyl cellulose 8 wt. parts were dissolved in acetone to make 100 parts and coated on a paper **support** to form a 4 g/m<sup>2</sup> layer. A transfer paper was prepd. by coating a condenser paper sheet with a soln. prepd. by dissolving magenta dye III 3.5 g in acetone 500 mL contg. 2% cellulose acetate to form 2.5 g/m<sup>2</sup> layer. The recording paper and the transfer paper were laid together with coated sides inside and heat was applied by ironing from the transfer paper side for 5 s at 200.degree.. The obtained image showed d. 1.95 and no deterioration by heat was obsd. The image remained stable without discoloration.

IC B41M005-26

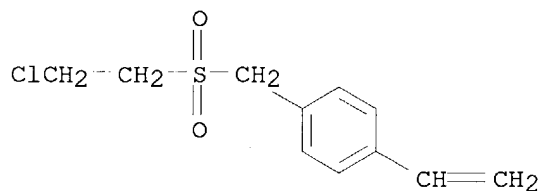
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 42

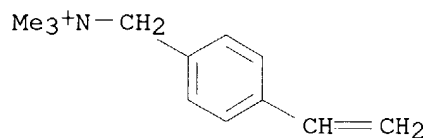
IT 66822-64-8 71974-69-1 94643-89-7 **94643-91-1**  
**94643-92-2** 94643-93-3 94736-25-1



RL: USES (Uses)  
 (dye image-receiving layer contg., for thermal-transfer recording paper)  
 IT **94643-91-1 94643-92-2**  
 RL: USES (Uses)  
 (dye image-receiving layer contg., for thermal-transfer recording paper)  
 RN 94643-91-1 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 1-[[ (2-chloroethyl)sulfonyl)methyl]-4-ethenylbenzene (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 94643-90-0  
 CMF C11 H13 Cl O2 S

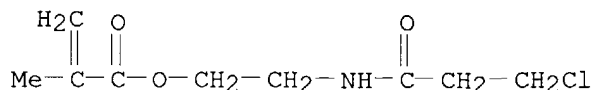


CM 2  
 CRN 7538-38-7  
 CMF C12 H18 N . Cl



● Cl<sup>-</sup>

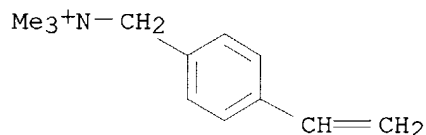
RN 94643-92-2 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with 2-[(3-chloro-1-oxopropyl)amino]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 66822-69-3  
 CMF C9 H14 Cl N O3



CM 2

CRN 7538-38-7

CMF C12 H18 N . Cl

● Cl<sup>-</sup>

L47 ANSWER 46 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1983:161690 HCAPLUS

DOCUMENT NUMBER: 98:161690

TITLE: Phase transfer catalyzed crosslinking of linear polymers

AUTHOR(S): Hodge, P.; Hunt, B. J.; Waterhouse, J.; Wightman, A.

CORPORATE SOURCE: Chem. Dep., Univ. Lancaster, Lancaster, LA1 4YA, UK

SOURCE: Polymer Communications (1983), 24(3), 70-3

CODEN: POCOEF; ISSN: 0263-6476

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Linear copolymers contg. benzyl chloride residues [e.g., chloromethylated styrene (60:40 m-p-isomer ratio)-styrene copolymer], or triphenylphosphonium salts or aldehyde residues derived from these, can be crosslinked under phase-transfer-catalyzed conditions by reaction with alkali and diphenols, dialdehydes, or bisphosphonium salts. Among crosslinking agents used were bisphenol A, p-Ph<sub>3</sub>P+CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>P+Ph<sub>3</sub> 2Cl<sup>-</sup>, and terephthalaldehyde. The polymers, even of low mol.wt., are satisfactorily crosslinked if 10-15% of the repeating units are capable of reacting with the crosslinking agent.

CC 37-6 (Plastics Manufacture and Processing)

IT **85465-04-9 85465-05-0**

RL: PRP (Properties)

(phase-transfer-catalyzed crosslinking of, with terephthalaldehyde)

IT **85465-04-9 85465-05-0**

RL: PRP (Properties)

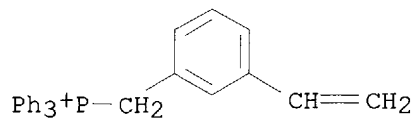
(phase-transfer-catalyzed crosslinking of, with terephthalaldehyde)

RN 85465-04-9 HCAPLUS

CN Phosphonium, [(3-ethenylphenyl)methyl]triphenyl-, chloride, polymer with N,N-dimethyl-2-propenamide and [(4-ethenylphenyl)methyl]triphenylphosphonium chloride (9CI) (CA INDEX NAME)

CM 1

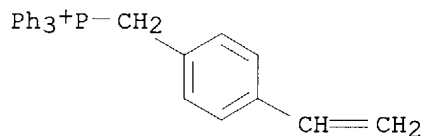
CRN 85465-03-8  
CMF C27 H24 P . Cl



● Cl<sup>-</sup>

CM 2

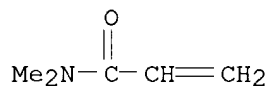
CRN 47562-35-6  
CMF C27 H24 P . Cl



● Cl<sup>-</sup>

CM 3

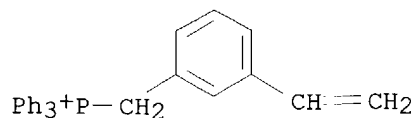
CRN 2680-03-7  
CMF C5 H9 N O



RN 85465-05-0 HCAPLUS  
CN Phosphonium, [(3-ethenylphenyl)methyl]triphenyl-, chloride, polymer with 1-ethenyl-1H-imidazole and [(4-ethenylphenyl)methyl]triphenylphosphonium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 85465-03-8  
CMF C27 H24 P . Cl

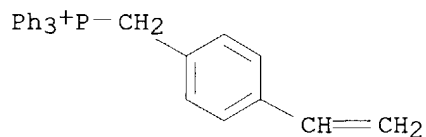


● Cl<sup>-</sup>

CM 2

CRN 47562-35-6

CMF C27 H24 P . Cl

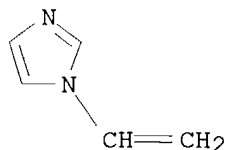


● Cl<sup>-</sup>

CM 3

CRN 1072-63-5

CMF C5 H6 N2



L47 ANSWER 47 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1983:99802 HCAPLUS  
DOCUMENT NUMBER: 98:99802  
TITLE: Photocell utilizing polymer dye gels  
PATENT ASSIGNEE(S): Tsuchida, Hidetoshi, Japan  
SOURCE: Jpn. Tokkyo Koho, 10 pp.  
CODEN: JAXXAD  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

JP 57032992	B4	19820714	JP 1977-50472	19770430
JP 53135588	A2	19781127		

PRIORITY APPLN. INFO.: JP 1977-50472 19770430

AB An efficient and stable photocell consists of 1st and 2nd electrodes from transparent and nontransparent conductors and a **hydrogel** film contg. a reducing agent and a polymer dye from a polymer with a cationic group and photooxidn.-redn. dye. The photocell is useful as a solar cell.

IC H01L031-04; H01M014-00

CC 76-5 (Electric Phenomena)  
Section cross-reference(s): 52

IT 121-44-8D, reaction product with thionine and polymers 124-09-4D, reaction product with thionine and polymers 581-64-6D, reaction product with amines and polymers 51025-73-1D, reaction product with thionine and hexamethylenediamine 65205-88-1D, reaction product with thionine and triethylamine **67236-15-1D**, reaction product with thionine and hexamethylenediamine  
RL: DEV (Device component use); USES (Uses)  
(photocells contg.)

IT **67236-15-1D**, reaction product with thionine and hexamethylenediamine  
RL: DEV (Device component use); USES (Uses)  
(photocells contg.)

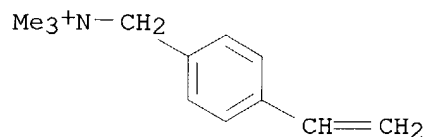
RN 67236-15-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

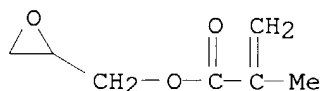
CMF C12 H18 N . Cl



● Cl<sup>-</sup>

CM 2

CRN 106-91-2  
CMF C7 H10 O3



L47 ANSWER 48 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1982:591269 HCAPLUS  
 DOCUMENT NUMBER: 97:191269  
 TITLE: Electrochromic recording paper  
 PATENT ASSIGNEE(S): Canon K. K., Japan  
 SOURCE: Jpn. Tokkyo Koho, 8 pp.  
 CODEN: JAXXAD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57009958	B4	19820224	JP 1974-27849	19740311
PRIORITY APPLN. INFO.:			JP 1974-27849	19740311
AB	Electrorecording materials are described which contain an electrochromic material exhibiting a memory effect and a polarity dependence, and a zeolite type compd. Thus, WO3, Mol. Sieve 13X, and poly(vinyl alc.) were mixed in EtOH and coated on a conductive paper <b>support</b> to give an electrochromic recording sheet.			
IC	B41M005-20			
ICA	G11B007-24; G11C013-04			
CC	74-9 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)			
IT	57-11-4, uses and miscellaneous 64-19-7, uses and miscellaneous 471-34-1, uses and miscellaneous 497-19-8, uses and miscellaneous 1304-28-5, uses and miscellaneous 1304-76-3, uses and miscellaneous 1306-19-0, uses and miscellaneous 1308-04-9 1308-38-9, uses and miscellaneous 1309-37-1, uses and miscellaneous 1309-38-2, uses and miscellaneous 1309-48-4, uses and miscellaneous 1309-60-0 1309-64-4, uses and miscellaneous 1313-13-9, uses and miscellaneous 1313-27-5, uses and miscellaneous 1313-96-8 1313-99-1, uses and miscellaneous 1314-06-3 1314-13-2, uses and miscellaneous 1314-27-8 1314-35-8, uses and miscellaneous 1314-61-0 1314-62-1, uses and miscellaneous 1314-68-7 1314-87-0 1314-95-0 1317-36-8, uses and miscellaneous 1317-38-0, uses and miscellaneous 1317-42-6 1318-10-1 1318-95-2 1343-93-7 1344-09-8 1344-48-5 1345-04-6 7236-42-2 7446-07-3 7447-39-4, uses and miscellaneous 7447-40-7, uses and miscellaneous 7631-95-0 7631-99-4, uses and miscellaneous 7646-85-7, uses and miscellaneous 7647-01-0, uses and miscellaneous 7647-14-5, uses and miscellaneous 7647-15-6, uses and miscellaneous 7664-93-9, uses and miscellaneous 7705-08-0, uses and miscellaneous 7718-54-9, uses and miscellaneous 7758-89-6 7758-95-4 7758-98-7, uses and miscellaneous 7761-88-8, uses and miscellaneous 7774-29-0 7779-88-6 7782-91-4 7783-00-8 7783-03-1 7783-08-6 7783-40-6 7783-90-6, uses and miscellaneous 7783-96-2 7785-23-1 7786-30-3, uses and miscellaneous 7787-47-5 7787-60-2 7789-40-4 7789-47-1 7789-75-5, uses and miscellaneous 7790-30-9 7790-69-4 7790-86-5 7791-12-0 7803-55-6 7803-68-1 9002-89-5 9003-05-8 9003-39-8 10025-82-8 10026-12-7 10042-76-9 10049-23-7 10097-28-6 10099-74-8 10101-63-0 10377-66-9 10421-48-4 12002-97-0 12014-74-3 12024-08-7 12024-10-1 12024-21-4 12026-66-3 12027-12-2 12030-14-7 12036-01-0 12038-20-9 12060-00-3D, <b>solid</b> solns. with lead zirconate 12060-01-4D, <b>solid</b> solns. with lead titanate 12068-85-8 12125-22-3 12136-26-4 12137-20-1 12137-42-7 12137-99-4 12138-09-9 12172-98-4 12173-10-3 12173-98-7			

12251-23-9 12251-32-0 13106-76-8 13138-45-9 13446-49-6  
 13453-10-6 13463-67-7, uses and miscellaneous 13520-62-2 18282-10-5  
 18820-29-6 20338-08-3 20816-12-0 20820-34-2 20909-44-8  
 21908-53-2 25053-27-4 25320-22-3 25322-68-3 26161-33-1  
 26338-45-4 **26780-21-2** 28826-65-5 38056-78-9 51429-77-7  
 54452-17-4 62744-35-8 63310-83-8 78723-25-8 82063-34-1  
 82063-35-2

RL: USES (Uses)

(electrochromic recording paper contg.)

IT **26780-21-2**

RL: USES (Uses)

(electrochromic recording paper contg.)

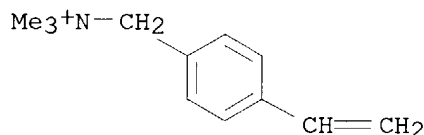
RN 26780-21-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer  
 (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 49 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1980:8120 HCAPLUS

DOCUMENT NUMBER: 92:8120

TITLE: Starching agent

INVENTOR(S): Matsunaga, Kinjiro; Masuda, Shinichi; Nakagawa, Yunosuke; Tachibana, Kyozauro

PATENT ASSIGNEE(S): Kao Soap Co., Ltd., Japan

SOURCE: Ger. Offen., 84 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2753061	A1	19780601	DE 1977-2753061	19771128
JP 53070191	A2	19780622	JP 1976-143178	19761129
JP 53094688	A2	19780818	JP 1977-6609	19770124
US 4139509	A	19790213	US 1977-850693	19771111
GB 1589482	A	19810513	GB 1977-47296	19771114
GB 1589483	A	19810513	GB 1979-27391	19771114
GB 1589483	A	19810513	GB 1979-27391	19771114

ES 464506	A1	19790101	ES 1977-464506	19771125
BE 861238	A1	19780316	BE 1977-56468	19771128
FR 2372267	A1	19780623	FR 1977-35913	19771129
FR 2372267	B1	19800620		

PRIORITY APPLN. INFO.: JP 1976-143178 19761129  
JP 1977-6609 19770124

AB Household starching emulsions with good storage stability and high starching properties are manufd. by emulsion polymg. a vinyl monomer, e.g. vinyl acetate, in the presence of cationic polymers, cationic monomers, or a cationic surfactant in an aq. soln. of poly(vinyl alc.) (I) [9002-89-5] or modified starch or cellulose deriv. Thus, vinyl acetate was polymd. in the presence of I, poly(N-methyl-4-vinylpyridinium chloride) [28826-65-5], and methacryloyloxyethyltrimethylammonium chloride (II) [72199-13-4] in H<sub>2</sub>O using a free radical initiator to give an emulsion which was storage-stable for 1 mo at room temp., while the same emulsion prepd. in the absence of II sepd.

IC D06M015-04; C08L003-02; C08L001-08

CC 46-3 (Surface Active Agents and Detergents)

IT **Polyamides, uses and miscellaneous**  
Surfactants  
(cationic, storage-stable starching emulsions manufd. in presence of)

IT 79-14-1D, reaction products with diethylenetriamine-fatty acid-epichlorohydrin adduct 107-64-2 111-40-0D, reaction products with fatty acids, epichlorohydrin and hydroxyacetic acid 9002-89-5  
9003-20-7 9010-88-2 26062-79-3 26161-33-1 26616-35-3  
**26780-21-2** 28826-65-5 51278-03-6 72196-89-5 72198-29-9  
72199-13-4 72199-14-5  
RL: USES (Uses)  
(starching emulsions contg., storage-stable)

IT **26780-21-2**  
RL: USES (Uses)  
(starching emulsions contg., storage-stable)

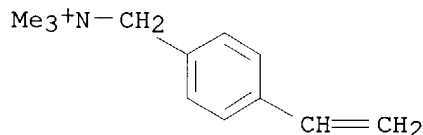
RN 26780-21-2 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl



● Cl<sup>-</sup>

L47 ANSWER 50 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1978:451385 HCAPLUS  
DOCUMENT NUMBER: 89:51385



TITLE: Color diffusion transfer material  
 INVENTOR(S): Sato, Yuzuru; Asano, Masao; Ishihara, Masao; Terada, Sadatugu  
 PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan  
 SOURCE: Ger. Offen., 72 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2728844	A1	19771229	DE 1977-2728844	19770627
JP 53001024	A2	19780107	JP 1976-75200	19760625
JP 58057098	B4	19831219		
US 4142899	A	19790306	US 1977-808909	19770622
GB 1587734	A	19810408	GB 1977-26094	19770622
AU 499428	B1	19790412	AU 1977-26408	19770623
			JP 1976-75200	19760625

## PRIORITY APPLN. INFO.:

AB A color photog. diffusion-transfer material is described that is composed of a light-sensitive Ag halide recording material and an image-receptor material contg. as mordant a mixed polymer from a monomer contg. .gtoreq.1 F atom 10-60% and CHR:CR1ZN+R2R3R4 X- (R = H or the necessary atoms to form an N-alkylenemaleimido ring with Z; R1 = H or a short chain alkyl, Z = alkylene, allylene, aralkylene, CO2Z1, CONHZ1, or O2CZ1 where Z1 is alkylene; R2, R3, R4 = alkyl, allyl, aryl, or R3 and R4 together with Z can form a heterocycle; X = anion) 40-90%. Some 17 polymers are described. Thus, a color diffusion-transfer material was exposed and then contacted with an image-receptor layer contg. a mordant having the structure I in the presence of an alk. processing soln. to give a color image with a yellow, magenta, and cyan Dmax of 1.21, 1.55, and 1.82, resp., vs. 1.02, 1.25, and 1.21, resp., for a control contg. a mordant having the structure II.

IC G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT **66209-06-1** 66209-08-3 66209-10-7 66209-12-9 66209-17-4

66209-19-6 **66209-20-9** 66348-02-5 66456-23-3 66456-27-7

RL: USES (Uses)

(mordant, for color diffusion-transfer photog. materials)

IT **66209-06-1 66209-20-9**

RL: USES (Uses)

(mordant, for color diffusion-transfer photog. materials)

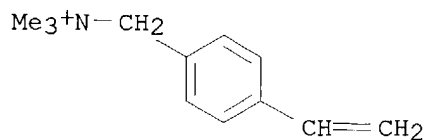
RN 66209-06-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

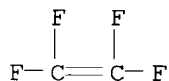
CMF C12 H18 N . Cl



CM 2

CRN 116-14-3

CMF C2 F4



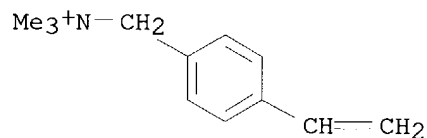
RN 66209-20-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
N,N-dimethyl-2-propenamide and 2,2,3,3-tetrafluoropropyl 2-propenoate  
(9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

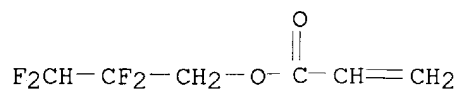
CMF C12 H18 N . Cl



CM 2

CRN 7383-71-3

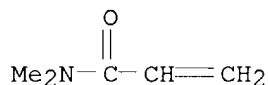
CMF C6 H6 F4 O2



CM 3

CRN 2680-03-7

CMF C5 H9 N O



L47 ANSWER 51 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:434145 HCAPLUS

DOCUMENT NUMBER: 89:34145

TITLE: Electrophotographic plates having good moisture resistance and durability

INVENTOR(S): Tarumi, Noriyoshi; Tamura, Akihiko; Okiso, Shoichi; Nagayasu, Koichi

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52082238	A2	19770709	JP 1975-157316	19751227
JP 58024782	B4	19830523		

PRIORITY APPLN. INFO.: JP 1975-157316 19751227

AB Moisture resistance and durability of electrophotog. plates are improved by providing an intermediate layer (between the photoconductor layer and the **support**) contg. a compd. having isocyanate groups and another compd. having OH (and/or amino) and quaternary ammonium groups. The intermediate layer is esp. useful for electrophotog. plates using a CdS photoconductor layer. Thus, an Al **support** was coated (5 .mu. dry) with a soln. contg. I (n:m:p = 35:10:55) 100 and II 7.5 parts (in a 9:1 MeCOEt-MeOH mixt.; 10% **solids**) and overcoated (25 .mu. dry) with a photoconductor compn. consisting of CdS (av. particle size 1 .mu.) 10, a thermosetting acrylic resin (Daiyanaru HR-116, 50% **solids**, from Mitsubishi Rayon) 6, and a melamine resin (Nikarakku MS-001, 60% **solids**; from Sanwa Chem. Co.) 1 g to give an electrophotog. plate. The plate was used continuously (at charge voltage -6 kV, 30.degree., 80% relative humidity, and 20 copies/min) in a magnetic brush development copier to produce .gtoreq.8000 high-quality copies vs. .ltoreq.3000 copies for a control with poly(vinyl alc.) instead of I.

IC G03G005-14

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT **65768-72-1** 65768-73-2 65768-75-4 65768-76-5 65768-77-6

RL: USES (Uses)

(cadmium sulfide electrophotog. plate intermediate layer contg. isocyanate and, for improved moisture resistance)

IT **65768-72-1**

RL: USES (Uses)

(cadmium sulfide electrophotog. plate intermediate layer contg.  
isocyanate and, for improved moisture resistance)

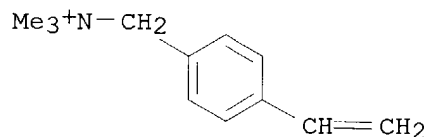
RN 65768-72-1 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with  
methyl 2-methyl-2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl

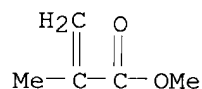


● Cl<sup>-</sup>

CM 2

CRN 80-62-6

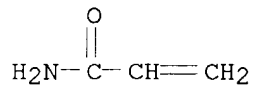
CMF C5 H8 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



L47 ANSWER 52 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1978:144296 HCAPLUS

DOCUMENT NUMBER: 88:144296

TITLE: Antistatic finishing of photographic recording  
material

INVENTOR(S): Nagayasu, Kouichi; Mayama, Masayoshi; Terada,  
Sadatugu; Ishihara, Masao

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Ger. Offen., 49 pp.

DOCUMENT TYPE: CODEN: GWXXBX  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 German  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2717998	A1	19771103	DE 1977-2717998	19770422
JP 52129520	A2	19771031	JP 1976-45458	19760423
JP 57015376	B4	19820330		
AU 7724449	A1	19781026	AU 1977-24449	19770420
AU 500865	B2	19790607		
GB 1535685	A	19781213	GB 1977-16573	19770421
			JP 1976-45458	19760423

PRIORITY APPLN. INFO.:  
 AB Ag halide photog. materials can be given an antistatic finish by treatment with a polymer prep. from a monomer contg. .gtoreq.1 F atom (10-60%) and CHR:CR1ZN+R2R3R4X-(R = H or the necessary atoms to form an N-alkylenemaleimido ring with Z; R1 = H or short chain alkyl; Z = alkylene, allylene, aralkylene, CO2Z1CONHZ1, O2CZ1, or CONZ1 where Z1 is alkylene; R2, R3, R4 = alkyl, allyl, aryl, or R3 and R4 together with Z can form a heterocycle; X = anion) (40-90%). Some 15 polymers are described. Thus, to a gelatin-Ag(Br,Cl,I) emulsion (gelatin 32, Ag(Br,Cl,I) 96g, AgI 3 and AgCl 80 mol %) was added 30 g I/100 g gelatin along with the usual hardeners, stabilizers, and coating agents. The emulsion was then coated on a support, dried to give a 6.mu. layer, and then stored for 2 h at 25.degree. and 50% relative humidity to show a sp. surface resistance of 1.5 .times. 1010.OMEGA. vs. > 1 .times. 1012 .OMEGA. of a I-free control.

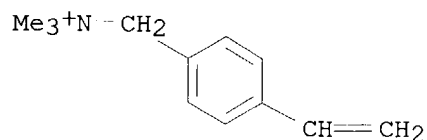
IC G03C001-82  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)  
 IT **66209-06-1** 66209-07-2 66209-08-3 **66209-09-4**  
 66209-10-7 66209-11-8 66209-12-9 66209-13-0 66209-16-3  
 66209-17-4 66209-19-6 **66209-20-9**  
 RL: USES (Uses)  
 (antistatic compns. contg., for photog. films)

IT **66209-06-1 66209-09-4 66209-20-9**  
 RL: USES (Uses)  
 (antistatic compns. contg., for photog. films)

RN 66209-06-1 HCAPLUS  
 CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

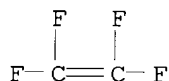
CRN 7538-38-7  
 CMF C12 H18 N . Cl



CM 2

CRN 116-14-3

CMF C2 F4



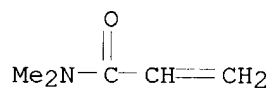
RN 66209-09-4 HCAPLUS

CN Pyridinium, 4-ethenyl-1-methyl-, methyl sulfate, polymer with  
N,N-dimethyl-2-propenamide and 2,2,3,3,4,4,5,5-octafluoropentyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

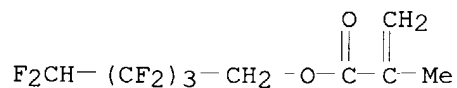
CMF C5 H9 N O



CM 2

CRN 355-93-1

CMF C9 H8 F8 O2



CM 3

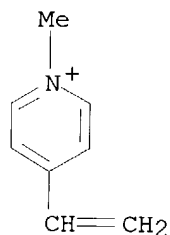
CRN 13423-24-0

CMF C8 H10 N . C H3 O4 S

CM 4

CRN 45708-68-7

CMF C8 H10 N



CM 5

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

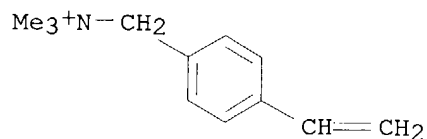
RN 66209-20-9 HCAPLUS

CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with N,N-dimethyl-2-propenamide and 2,2,3,3-tetrafluoropropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

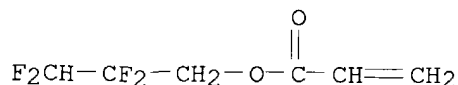
CMF C12 H18 N . Cl

● Cl<sup>-</sup>

CM 2

CRN 7383-71-3

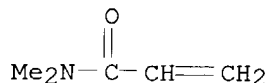
CMF C6 H6 F4 O2



CM 3

CRN 2680-03-7

CMF C5 H9 N O



L47 ANSWER 53 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1973:529081 HCAPLUS

DOCUMENT NUMBER: 79:129081

TITLE: Poly(vinyl alcohol) **hydrogels** for synthetic articular cartilage material

AUTHOR(S): Bray, James C.; Merrill, Edward W.

CORPORATE SOURCE: Dep. Chem. Eng., Massachusetts Inst. Technol., Cambridge, MA, USA

SOURCE: Journal of Biomedical Materials Research (1973), 7(5), 431-43

CODEN: JBMRBG; ISSN: 0021-9304

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A synthetic articular cartilage material, for use in reconstructive joint surgery, and with the properties of poly(vinyl alc.) (PVA) **hydrogels** reinforced by cryst. was developed. Cationic PVA **hydrogels** provide the low friction lubrication necessary in a cartilage prosthesis when in contact with natural synovial fluid.

CC 63-7 (Pharmaceuticals)

ST polyvinyl alc artificial cartilage; **hydrogel** polyvinyl alc cartilageIT 9002-89-5 50885-95-5 **51109-52-5** 67668-80-8

RL: BIOL (Biological study)

(hydrogels, as artificial cartilage, synovial fluid in relation to)

IT **51109-52-5**

RL: BIOL (Biological study)

(hydrogels, as artificial cartilage, synovial fluid in relation to)

RN 51109-52-5 HCAPLUS

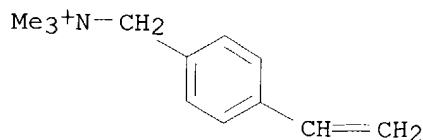
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, chloride, polymer with ethenol (9CI) (CA INDEX NAME)

CM 1

CRN 7538-38-7

CMF C12 H18 N . Cl





●  $\text{Cl}^-$

CM 2

CRN 557-75-5

CMF C2 H4 O

$\text{H}_2\text{C}=\text{CH}-\text{OH}$

L47 ANSWER 54 OF 54 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1973:518264 HCAPLUS

DOCUMENT NUMBER: 79:118264

TITLE: Aspects of three types of **hydrogels** for biomedical applications

AUTHOR(S): Bruck, Stephen D.

CORPORATE SOURCE: Natl. Heart Lung Inst., Natl. Inst. Health, Bethesda, MD, USA

SOURCE: Journal of Biomedical Materials Research (1973), 7(5), 387-404

CODEN: JBMRBG; ISSN: 0021-9304

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 35 refs. Some of the chem. and phys. properties of 3 different **hydrogels** are analyzed as they relate to biol. compatibility. The importance of the permeability and diffusion coeffs., porosity, and the possible role of quasiorganized water within the **hydrogels** are emphasized. The biol. environment with its dissolved components such as ions, proteins, carbohydrates, lipids, and enzymes influences the ultimate biol. performance of **hydrogels**. The biol. performance depends not only on the hydrophilicity of the system but on numerous other parameters including the chem. compn., types and no. of crosslinks, presence of functional groups, quasi-organized water structure, porosity, and the thermodynamic interaction parameters between the components of the biol. environment and the gel. The presence of anionic groups on certain synthetic **hydrogel** surfaces may be not essential for blood compatibility, provided that such materials are carefully distinguished from other hydrophilic gels.

CC 63-0 (Pharmaceuticals)

ST review **hydrogel** biomaterial

IT Prosthetic materials and Prosthetics  
(**hydrogels**, biocompatibility of)

IT 9003-05-8 28088-53-1 50885-97-7

RL: BIOL (Biological study)

(**hydrogels**, prosthetic materials, biocompatibility of)

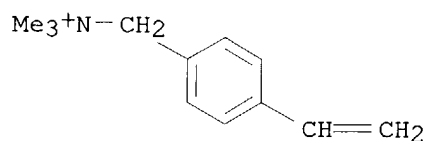
IT 28088-53-1  
RL: BIOL (Biological study)  
(hydrogels, prosthetic materials, biocompatibility of)  
RN 28088-53-1 HCAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N,N,N-trimethyl-, homopolymer, salt with  
4-ethenylbenzenesulfonic acid homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 49718-56-1  
CMF (C12 H18 N)x  
CCI PMS

CM 2

CRN 46231-82-7  
CMF C12 H18 N



CM 3

CRN 49718-51-6  
CMF (C<sub>8</sub> H<sub>7</sub> O<sub>3</sub> S)x  
CCI PMS

CM 4

CRN 46061-72-7  
CMF C<sub>8</sub> H<sub>7</sub> O<sub>3</sub> S

